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PUNJAB SETTLEMENT MANUAL

BY

SIR JAMES M. DOUIE, K.C.S.I., I.C.S.

FOURTH EDITION.

(Issued in 1930.)



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PREFACE TO FIRST EDITION.

For many years after annexation Mr. Thomason's *Directions for Settlement Officers in the North-Western Provinces* was the authoritative text-book in the Punjab as regards all matters connected with land-revenue settlements. It comprises a masterly discussion of the nature and varying degrees of rights in land and of the organization of village communities in the North-Western Provinces, a clear account of the procedure connected with the framing of the records-of-rights which was in force fifty years ago, and an exposition, brief but singularly lucid, of the principles of a sound assessment policy, and the methods by which a fair demand can in practice be determined.

2. It was inevitable that some parts of a work written for the guidance of Settlement Officers in another Province should be inapplicable to the Punjab. But its authority was great, and defects in some of our earlier settlements, both as regards the definition of rights in land and the method followed in assessment, are traceable to the reluctance felt to allow deviations from a model which was so justly admired. The first attempt to write a handbook specially adapted for the use of Punjab officials was made by Mr. Robert Cust, whose *Revenue Manual* was issued in 1866. The 2nd and 3rd chapters of that work deal with rights in land and the principles and methods of land-revenue settlements. The paragraphs relating to assessment are taken with little or no alteration from the "*Directions for Settlement Officers.*"

3. After the passing of the first Punjab Tenancy Act (XXVIII of 1868) and the first Land Revenue Act (XXXIII of 1871) and the issue of rules under the latter, the duty of revising the *Directions* was entrusted to Mr. D. G. Barkley. The task was executed with the care and thoroughness which marked all Mr. Barkley's work. But his edition of the *Directions* is not wholly free from the blemishes which beset an attempt to sew new cloth on an old garment.

4. Over twenty years have passed since it was published. In the interval the procedure connected with survey and the framing of records-of-rights has been greatly altered. Assessment data of a far more reliable character than were formerly available have been supplied to Settlement Officers, and they are now expected to devote much greater attention to the calculation of the land-owner's assets than was formerly considered necessary. The methods of assessment have been modified, especially in the direction of adapting the demand in insecure tracts to the varying

yields of good and bad seasons, and the great importance of the distribution of the village assessment over holdings has at length been appreciated. The cumulative effect of these changes has been so great that Mr. Barkley's work has become obsolete, and the late Lieutenant-Governor, Sir Dennis Fitzpatrick, directed me to prepare a new Settlement Manual for the Punjab. This Manual, though not authoritative in matters of opinion, is issued after examination by the Financial Commissioner, with the approval of the Government of the Punjab, as a guide to Settlement Officers in all work bearing on assessments and the preparation of the record-of-rights. As all the useful parts of Revenue Circular No. 30 have been incorporated in the Manual or its appendices, that circular is now superseded.*

5. Even those who know best and value most the "Directions for Settlement Officers," and who miss in these pages Mr. Thomason's power of terse and lucid exposition, will admit that it was necessary to make the present Manual an independent work. It has been my aim not only to describe present policy and procedure in the matter of land-revenue settlements, but to trace the growth of that policy and procedure from annexation to the present time. Some may think that too much space has been given to the historical part of the work, and that more than is needful has been said of past controversies and abandoned policies. But it must be remembered that the generation familiar with the early revenue history of the Punjab is rapidly passing away, and that experience shows that it is hard to say of any administrative controversy in India that it is really dead, or of any policy that it has been finally abandoned. Some questions which seemed at one time to have been settled are sure to be revived, and it is well that those who may have to take part in the discussion should know, at least in broad outline, what in the past has been urged and decided in regard to them.

6. As settlement policy is likely to vary in the future as it has varied in the past, I shall endeavour to keep the work up to date by arranging for the issue of correction slips as may be required from time to time. These may be inserted on the blank pages at the end of the volume.

6th October 1899.

J. M. DOUIE.

*This refers to a Revenue Circular now obsolete.

NOTE TO SECOND EDITION.

THE first edition of the Settlement Manual has been exhausted. The opportunity has been taken to bring the work up to date by incorporating in the text and in the appendices the *addenda* and *corrigenda* which have been issued from time to time. Some other additions have been made, the more important of which are noted below.

Chapter VIII has been improved by the insertion of an interesting account of the tenures in the independent territory to the north of the Peshawar district which Sir A. H. McMahon kindly sent me some years ago. The paragraphs dealing with the tenures of the South-West Punjab have been amplified, and the meagre account given in the first edition of those of the North-West Punjab has been re-written. Chapter XIV contains additional instructions as to the record-of-rights and its attestation taken mainly from a circular issued by Mr. Wilson when he was Settlement Commissioner. The latest orders regarding surplus produce estimates will be found in Chapter XXIV and Appendix XIV. To Chapter XXVI the directions as to remissions of revenue when wells fall out of use, published in 1904, and to Chapter XXIX, the latest rules as to exemptions on account of new wells, have been added. Extracts from Government of India, Revenue and Agriculture Department, Circular I of 16th January 1902, embodying the last pronouncements of the Supreme Government on the term of settlement and progressive assessments have been given in Chapters XXVIII and XXIX. Appendices II (Forecast Report) and XIV (Surplus Produce Estimates) are new, and the orders contained in Appendix II of the first edition now appear in their proper place in Appendices X and XI.

23rd September 1908.

J. M. DOUIE.

NOTE TO THE THIRD EDITION.

THE present edition of the Settlement Manual contains in the text all the additions and alterations which have been made by correction slips since the last reprint, together with certain revised instructions to which the sanction of Government has been obtained. No change has been made in the numbering of paragraphs. The more important alterations are noted below.

The historical portion of the Manual has been brought up to date by the inclusion in Chapter II of an account of alterations in the provincial boundaries during the current century and by the account given in Chapter VI of recent developments of settlement policy in regard to the revision of records and the assessment of canal irrigated and riverain tracts and of well lands. An important circular issued by the Financial Commissioner on the attestation of records had been incorporated in Chapter XIV, and a statement of the arguments for *killabandi* and of the procedure for giving effect to it has been printed as a new Appendix XIV. It is no longer considered necessary to test produce estimates by calculations of domestic consumption or of surplus produce exported. Portions of Chapter XVIII and XXIX and old Appendix XIV have therefore been omitted. The instructions contained in Chapter XXV for the inspection of estates by tahsildars for assessment purposes are held to be unnecessary and have not been repeated. Chapter XXVI has been brought up to date by a revision of the description of the assessment of lands watered by State canals, and in the same chapter and in a new Appendix XXIII the principles and rules governing the rights of assignees to enhancements of assessment due to the introduction of irrigation have been consolidated. The discussion of the advantages and disadvantages of fluctuating assessments in Chapter XXVII has been curtailed. The instructions remain unaltered. Chapter XXVIII has been brought up to date on the subject of term of settlement, and Chapter XXIX now provides that a progressive enhancement, which has been sanctioned on an assessment report, may be introduced when the time comes without the further special sanction of the Commissioner. The rules regarding the distribution of the revenue over holdings have been printed in a new Appendix XXII, and the description in Chapter XXXII of the measures, which may be taken before and after announcement of the demand, has been re-written. In the same chapter the suggestion that distribution rates may be fixed before determining the assessment has been omitted, and the instructions for distributing a demand of which portion is deferred have been revised and amplified. Chapter XXXIII now contains instructions for the preparation of a district *Dastur-ul-Aml*, where necessary.

Appendix I contains the most recent assessment instructions issued by the Government of India. Appendices III and V have been brought up to date, and Appendix II includes certain recent instructions regarding the examination of prices in forecast reports. The instructions for the assessment of urban lands have been consolidated in Appendix XV. Some reductions in the scope of assessment reports have been made in Appendix XVI, and normal limits of length have been indicated. Appendix XXI is as revised after consideration of certain experiments in expediting despatch by dispensing with khataunis and otherwise in Gujrat, Lahore and Shahpur and of the opinions of the Settlement Officers who worked on it from 1909 to 1913 ; and incorporates all the alterations decided on in consequence.

The 22nd December 1914.

A. H. DIACK.

NOTE TO THE FOURTH EDITION.

ALL the correction slips to the third edition have been incorporated.

All changes necessitated by the Amended Land Revenue Act passed in 1928 in regard to (a) the lowering of the standard of assessment from one-half to one-fourth of the net-assets and (b) the duration of settlements have been made.

The new rules framed by the Punjab Legislative Council under Section 60 of the Land Revenue Act have been given *in extenso* in Appendix I (E). Appendix XXII has been cancelled in consequence of the rules contained therein being incorporated in the new rules. Appendix V has also been omitted as it now serves no useful purpose.

Dated Lahore, 20th February 1930.

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Punjab Settlement Manual.

CHAPTER I.—Introductory.

Rights of State and private land-owners in land and its produce.—

In India the State has always claimed a share of the produce of the land from the persons in whom it recognized a permanent right to occupy and till it or arrange for its tillage.* It is needless to discuss the various ways in which this permanent title was acquired by families or individuals: it is enough to note that the right of the ruler to his share and the right of the occupier to hold the land he cultivated and pass it on to his children both formed part of the ancient customary law of the country, however the latter might occasionally be denied in practice by an unjust Government.†

2. Ownership of land in India. Land revenue not a land tax.—Broadly speaking, individuals exercising a permanent right of the kind described above subject only to payment of the dues of the State have been recognized by us as “owners” or “proprietors,” but it would be a mistake to assume that these words, as used in India, imply all that they do in England. The share of the State, which we call the land revenue, is not a land tax.‡ It is more analogous to rent, and in early settlement literature it was so described, the Government being represented as surrendering to the landowner a small portion of the rent. The land revenue is therefore “the first charge upon the rents, profit, or produce” of an estate or holding, and, until it has been paid, they cannot, without the previous consent of the Collector, be taken in execution of a decree obtained by any private creditor. (Land Revenue Act, XVII of 1887, section 62.)

3. Rent under native system of assessing land revenue.—Native rulers sometimes took their share in kind, dividing the crops with the cultivator on the threshing floor (*batai*). For certain crops, known as *sabti*, which it was inconvenient to divide, e.g., cane and poppies, fixed money rates were charged per *bigha* or *kanal*. At other times the State officials resorted to appraisement (*kan* or *kankut*), estimating the amount of the Government share of the crops, and usually taking its value in money. Numerous cesses (*abwab*) were levied in addition to the land revenue proper (*mal*). A prudent or humane ruler forbore to make the burden too heavy to be borne, and it is obvious that the collections were roughly adjusted to the character of the seasons, and pressed much less heavily than a fixed cash demand equal to the average of the fluctuating amounts realized would have done. Rent in the usual sense of the word hardly existed in the

*See the opening words of the first clause of Regulation XXXI of 1803: “By the ancient law of the country the ruling power is entitled to a certain proportion of the annual produce of every *bigha* of land.”

†“In the early settlement of 1846 an old Sikh bluntly remarked to the Government official that the land tax (?) belonged to Government, but the land to the people.”—Cust’s Revenue Manual, page 6.

‡“The land revenue of India, as of all eastern countries, is less to be regarded as a tax on the landowners than as the result of a kind of joint ownership in the soil or its produce, under which the latter is divided in unequal and generally undefined proportions between the ostensible proprietors and the State.” Paragraph 42 of Secretary of State’s Despatch (Revenue) No. 14, dated 9th July 1862.

districts now included in the North-Western Provinces or in the east of the Punjab. The small landholder was content to win a bare subsistence from the soil which he tilled with his own hands; the large landholder was at most able to obtain from the cultivator some trifling fraction of the crop, say one ser in the maund, as an acknowledgment of his superior title. As Mr. Thomason remarked in the valuable sketch of the system of land revenue administration prevalent in the North-Western Provinces* prefixed to his "Directions for Settlement Officers:"—"Undoubtedly traces are often to be found of the existence and exercise of a proprietary right in the land on the part of individuals. But so long as the sovereign was entitled to a portion of the produce of all land and there was no fixed limit to that portion, practically the sovereign was so far owner of the land as to be able to exclude all other persons from enjoying any portion of the net produce. The first step, therefore, towards the creation of a private proprietary right in the land was to place such a limit on the demand of the Government as would leave to the proprietors a profit, which would constitute a valuable property. Native Governments seldom recognize proprietary right as constituting a claim on the part of proprietors to engage for the village at a fixed sum. Ordinarily the collections are made direct from the actual cultivators either by the officers of Government or by some farmer or assignee of the Government share of the produce."

These statements are not fully applicable to the state of things which existed in many parts of the Punjab proper under Sikh rule. There the leading men or *maliks* were often strong enough to maintain a real proprietary right in the soil, to exact considerable grain dues besides services of value from the cultivators, and to engage exclusively for the revenue whenever a cash assessment was introduced.

4. Policy adopted of a moderate cash assessment fixed for a term of years.—A civilized Government like our own naturally prefers to commute its claim to a part of the produce of the soil into an annual money payment fixed for a term of years. British officers gradually learned that, if land revenue was to be collected in this shape with any sort of regularity, the demand must be pitched well below the native standard. The tendency to moderation was reinforced by considerations of humanity and a belief that the best way to promote the extension and improvement of agriculture was to render the land a source of increasing profit to its owners by limiting the land revenue and making it incapable of enhancement for a considerable period. This policy is especially associated in the north-west of India with the names of Robert Mertins Bird and James Thomason, and the first administrators of the Punjab brought into this province the lessons learned in their school.

5. Twofold object of a settlement.—To assess the land revenue is the primary object of a settlement. It is necessary at the same time to decide who shall pay the sums assessed, or, in technical language, with whom the settlement shall be made. To permit an individual to contract to pay the land revenue is usually an acknowledgment that he possesses a proprietary right in the soil and the drawing up of lists (*chewats*) showing the landowners in every estate, the extent of each man's right, and the amount

*Now the United Provinces.

of revenue for which he was primarily responsible, involved in our early settlements a determination for the first time of the ownership of every parcel of land in the country. It soon became evident that there were other persons who had rights in the soil besides those who could claim the offer of a settlement, and the advisability of making a complete record of all rights and liabilities connected with the land, including even those of tenants from year to year, was recognised. A settlement, therefore, consists of two main branches —

- ✓ || (a) the assessment; and
- || (b) the framing of a record of rights.

6. Purpose of hand-book.—It is the purpose of the following pages to show how these two operations are now carried out in the Punjab. But, as the present system has been slowly built up by the experience of nearly one hundred years in the North-Western Provinces and the Punjab, a historical sketch of the development of settlement policy may be usefully given as an introduction to the principal subject of this hand-book. But first will be briefly noticed the political changes of the first half of the nineteenth century, which pushed forward the bounds of the Empire from the Jamna to the Sutlej, and across the Sutlej to the Bias, and culminated in 1849 in the downfall of the Sikh kingdom and the formation of the new Province of the Punjab.

BOOK I—Historical.

CHAPTER II.—The Making of the Punjab.

7. Territories included in the Punjab when absorbed.—The territories now included in the Punjab were, with a few exceptions, absorbed in the British Empire between 1803 and 1849.

I.—The Delhi and Bhatti Territories.

8. Acquisition of Delhi and Bhatti territories.—The first tract to be conquered was the last to be annexed to the province. After the battle of Laswari in November 1803, Daulat Rao, Sindhia, by the treaty of Sirji Anjengaum, ceded to the East India Company and its allies all his territories between the Jamna and the Ganges and also those situated to the north of the possessions of the Rajas of Jaipur and Jodhpur and the Rana of Gohad. The latter comprised the present districts of Gurgaon, Delhi, Rohtak, Hissar, *tahsil* Panipat and *pargana* Karnal in the Karnal district, and *tahsil* Fazilka in Ferozepore. In 1805 Lord Cornwallis was sent out from England to reverse Lord Wellesley's policy by withdrawing from the territory to the west of the Jamna. It was parcelled out accordingly partly in life *jagirs* and partly in grants in perpetuity to native chiefs and others who had taken our side in the recent troubles.

9. History of these territories from 1803 to 1858.—Gradually by the escheat of life *jagirs* and the confiscation of other grants for disloyalty most of the territory came under the direct rule of the paramount power, the last and most important cases of confiscation being caused by the events of the Mutiny of 1857. Relics of the policy adopted in 1805-06 survive in the petty States of Dujana, Pataudi, and Loharu, and in the Mandal *istamar* in Karnal. In 1803 the territory beyond the Ghaggar, which from 1858 to 1884 formed the Sirsa district, now divided between Hissar and Ferozepore, was a wild desert tract known as Bhattiana or the Bhatti territory, and no effective control was exercised over it till 1818.* Down to 1832 the Delhi territory was controlled by the Resident at Delhi, and was not subject to the regulations in force in the rest of the Bengal Presidency. But Regulation V of that year, which abolished the office of Resident and annexed the Delhi territory to the jurisdiction of the Sadr Board and Courts of Justice at Allahabad, enjoined the Commissioner of the Delhi territory and all officers acting under his control, ordinarily to "conform to the principles and spirit of the regulations" in their civil, criminal, and revenue administration. After the Mutiny the Delhi division of the North-Western Provinces was in 1858 transferred to the Punjab, and formed into the Delhi and Hissar divisions, which embraced the six districts of Delhi, Gurgaon, Panipat, Rohtak, Hissar, and Sirsa.

II.—The Cis-Sutlej and Hill States.

10. Cis-Sutlej and Hills States taken under protection.—The Mahrattas were unable to set up again in any permanent shape

*Griffin's Punjab Rajas, pages 164—180.

the sway of Delhi over the territories lying to the north and west of Karnal and stretching from the Jamna to the Sutlej, which had been wrested from the Moghal Empire by the Sikhs after the battle of Sirhind in 1763. There were a few important States in this tract, but the rest of it was parcelled out in an extraordinary fashion among confederacies of Sikh horsemen, each of whom held a very petty share. Several of the Sikh chiefs fought against us under the Mahratta standard in 1803, and some of them had to be chastised again next year when Holkar was threatening our newly acquired authority to the west of the Jamna. An amnesty was proclaimed in 1805, and for a few years, in pursuance of the policy which sought to restrict our obligations beyond the Jamna, the Sikh States between that river and the Sutlej were left to themselves. But they were too weak and divided to resist the steady pressure of Ranjit Singh, who was bent on establishing his supremacy over all the followers of Guru Govind Singh. It is needless here to trace the causes and course of the long negotiations between the Maharaja and Sir Charles Metcalfe in 1808 and 1809.* Suffice it to say that the appeals of the leading Cis-Sutlej chiefs for British protection at last met with a favourable response, and in December 1808 Ranjit Singh was warned that by the issue of the war with the Mahrattas these chiefs had come under our protection, and informed that the British Government could not acknowledge his title to any territory acquired by him between the Sutlej and the Jamna after the first reference to their decision of the question of his right to make conquests to the south and east of the former river. The Maharaja was within an ace of declaring war, but in the end his statesmanlike instincts got the better of mortified ambition. On the 25th April 1809 he signed a treaty pledging himself to make no encroachment on the territories of the Cis-Sutlej States. The compact so reluctantly made was faithfully observed. By a proclamation, dated 3rd May 1809, "the Chiefs of Malwa and Sirhind" were declared to be under the protection of the British Government, and secured "in the exercise of the same rights and authority within their own possession" as they had hitherto enjoyed. They were exempted from tribute, but bound to assist any British troops passing through their country, and to aid with their forces in repelling invasion. Two years later a proclamation, dated 22nd August 1811, announced the determination of Government to turn a deaf ear to all complaints against the chiefs brought forward by their subjects. At the same time attempts by one chief or confederacy to seize the property of another were forbidden. In 1815, as the result of the Gurkha war, the Hill States lying to the south and east of the Sutlej came under our protection.

11. Development of protection into dominion.—It was impossible that the relations between the paramount power and the protected chiefs embodied in the proclamations of 1809 and 1811 should be permanently maintained. They were in fact issued under a misapprehension, it being imagined that "a few great chiefs only existed between the Jamna and the Sutlej, and that on them would devolve the maintenance of order." (Cunningham's "History of the Sikhs," page 152). Matters were complicated by the fact that our territory gradually

*See Griffin's Punjab Rajas, pages 95—122.

became much intermixed with the possessions of Sikh chiefs and confederacies in consequence of the escheat of estates and shares in default of heirs. During the first Sikh war in 1845 the open disloyalty of some chiefs and the neglect of others to fulfil their obligations under the proclamation of 1809 brought matters to a head. In declaring war the Governor-General announced that the possessions of Maharaja Dalip Singh on the left bank of the Sutlej were annexed. At the end of the war the estates of the Raja of Ladwa and Rupar Sardar, and a number of villages belonging to the Nabha State were confiscated, and the Kapurthala Chief was deprived of all his territory to the south of the Sutlej. In 1847 the remaining chiefs, with nine exceptions, the principal being the Patiala, Jind, and Nabha Rajas, were reduced to the status of *jagirdars*, and stripped of their criminal powers, while the obligation of feudal service was commuted into a money payment. In 1849 the *jagirdars* were deprived of their civil powers and made amenable to our courts, and finally in 1850 orders were issued that all their estates not already settled at their request or at the request of the *zamindars* should be assessed. The Cis-Sutlej territory was thus at last reduced to the condition of an ordinary British possession.

12. Administration of the Cis-Sutlej and Hill States before 1849.—The Resident at Delhi had charge of all our political relations with protected or independent States in the north-west of India. In 1821 he was replaced by a Governor-General's Agent, and a Superintendent of the Protected and Hill States was appointed, who had his headquarters at Ambala. In 1840 the Superintendent made way for a Governor-General's Agent for the North-West Frontier, who was also stationed at Ambala. After the first Sikh war the administration of the Cis-Sutlej States was entrusted to a Commissioner, whose charge comprised the four districts of Thanesar, Ambala, Ludhiana, and Ferozepore. The Cis-Sutlej Commissioner was sometimes under the orders of the Agent to the Governor-General, North-West Frontier, at Lahore, and sometimes directly under the Foreign Department of the Government of India. When the new Province of the Punjab was formed in 1849 the Cis-Sutlej Commissioner's charge was included in it. In 1862 the Thanesar district was broken up, part of it being transferred to Panipat, with which it formed the new Karnal district, and part to Ambala.

III.—The Jullundur Doab, Kangra, and Hazara.

13. Annexation of Jullundur Doab and Kangra.—The death of Ranjit Singh in 1839 was followed by anarchy in the Sikh State. In 1845 the selfish intriguers who ruled at Lahore in the name of the child Maharaja Dalip Singh, fearing the Khalsa army which they were powerless to control, yielded to its cry to be led across the Sutlej, in the hope that its strength would be broken in its conflict with the Company's forces.* In the war which ensued the valour of the Sikh soldiery

*Their policy "was indicated by the old Sikh motto—"throw the snake into your enemy's bosom. The snake was the evilly-disposed, violent yet powerful and splendid Sikh army. It was to be flung upon the British, and so destroyed." "(Memoirs of Alexander Gardner, Colonel of Artillery in the service of Maharaja Ranjit Singh, pages 261-2.)" Compare Gough's "The Sikhs and the Sikh Wars," page 60.

was rendered useless by the treachery or incapacity* of its leaders, and Lahore was occupied in February 1846. By the 3rd and 4th Articles of the Treaty signed on the 9th of March 1846, Maharaja Dalip Singh ceded all his territories in the *doab* between the Bias and the Sutlej and in the hill countries between the Bias and the Indus, including Kashmir and Hazara. Kashmir and Hazara were made over to Gulab Singh for a payment of seventy-five lakhs, but next year he induced the Lahore Darbar to take over Hazara and to give him in exchange territory near Jammu. The tract between the Bias and the Sutlej was formed into the Commissionership of the Trans-Sutlej States, and put in charge of Mr. John Lawrence. It was divided into the three districts of Jalandhar, Hoshiarpur, and Kangra. Three years later these districts and Hazara became part of the new province of the Punjab.

IV.—The Punjab west of the Bias.

14. Annexation of the Punjab west of the Bias in 1849 and administration of the province down to 1859.—After the Wazir Raja Lal Singh had been banished for instigating Sheikh Imam-ud-din to resist the occupation of Kashmir by Gulab Singh, an agreement was executed in December 1846 between the British Government and the principal Sikh Sardars, by which a Council of Regency was appointed, which was to be controlled by a British Resident stationed at Lahore. Henry Lawrence was the first Resident, but his brother John more than once officiated for him. They had under them a staff of able assistants, and one of the duties on which the latter were employed when the second Sikh war broke out in 1848 was the making of summary settlements in the different districts under the control of the Darbar. On the 21st of February 1849 the Khalsa army was finally broken in the battle of Gujrat; on the 30th of March the proclamation annexing the Punjab was read at Lahore, and Lord Dalhousie's despatch, dated 31st March, put the Government of the province under a Board of Administration consisting of the two Lawrences and Charles Greville Mansel. The Board was abolished in February 1853, and its powers vested in a Chief Commissioner, under whom the principal administrative officers were the Judicial Commissioner and the Financial Commissioner. John Lawrence, the first and only Chief Commissioner of the Punjab, became its first Lieutenant-Governor on the 1st of January 1859.

V.—Subsequent changes.

14-A. Formation of the North-West Frontier and Delhi Provinces.—In November 1901 the districts of Hazara, Peshawar, and Kohat, the Bannu and Marwat tahsils of Bannu, and the Trans-Indus part of Dera Ismail Khan, with the exception of the Vehoa *ilaka*, were separated from the Punjab and formed into the North-West Frontier Province. On the 1st October 1912, when the capital of India was removed to Delhi, the Delhi tahsil and the Mahrauli *thana* of Ballabgarh were separated from the Punjab and formed into the Delhi Province.

*See "The Sikhs and the Sikh Wars," pages 65 and 138.

CHAPTER III.—Development of Settlement policy in the North-Western Provinces down to the period of the annexation of the Punjab.

15. The Punjab settlement system brought from North-Western Provinces.—The settlement system of the Punjab was in its inception the system of the North-Western Provinces* as it stood in 1849, and it is a curious fact that the deviation from that model has been less in the province which adopted it than in the province which gave it birth. In his despatch establishing the Board of Administration Lord Dalhousie indicated that a Revenue Code for the newly conquered territory would be found “in the four printed circulars of the Sadr Board of Revenue, North-Western Provinces, and the pamphlets published under the orders of the Lieutenant-Governor.”

The pamphlets referred to were Thomason’s “Directions for Settlement Officers and Collectors,” which appeared in three parts between 1844 and 1848. But quite as important as these written instructions was the fact that the revenue policy of the Punjab was moulded by officers who had administered districts and made settlements in the North-Western Provinces. Of the three first members of the Board of Administration, two, John Lawrence and C. G. Mansel, were civilians trained in assessment and revenue work under Bird and Thomason, and, when Mansel left, he was succeeded by Robert Montgomery, who eleven years earlier had settled the Allahabad district. Altogether nineteen of the best of Thomason’s officers were sent to the Punjab, and they brought with them some of their native subordinates to form the nucleus of the new establishments. The province in this way obtained ready-made a system which had been gradually evolved by the labours of many able officers in the districts between the Jamna and the Ganges, and a sketch of the growth of its settlement policy would be incomplete without a brief account of the process by which the model it adopted took shape in its original home.

16. Early settlements in North-Western Provinces, 1801 to 1822.—The “ceded provinces” and the “conquered provinces,” as the districts now included in the North-Western Provinces were called, came under British rule in 1801 and 1803, respectively. As regards their revenue management they were till 1831 under the Board of Revenue at Calcutta, and it was the intention of Government to give them after ten years a permanent settlement. Meanwhile two triennial settlements and one quadrennial settlement were to be made, and thereafter the permanent settlement “was to be concluded with the same persons (if willing to engage, and if no others who have a better claim should come forward) for such lands as might be in a sufficient state of cultivation to warrant the measure on such terms as Government shall deem fair and equitable.”†

These early settlements were very rough and ready proceedings. There were no field survey maps, no reliable returns of the cultivated area or of

*Now the United Provinces of Agra and Oudh.

†Holt Mackenzie’s Memorandum, paragraph 7.

~~the crops grown, and no trustworthy records from which the profits of the landholder could be deduced. A Collector here and there might attempt to estimate the net produce of the land by calculating the value of the gross output and deducting the expenses of cultivation.~~ But the ordinary procedure followed in the early years of the century was that described by Mr. Thomason's Chief Secretary, Mr. John Thornton, in Volume XII of the "Calcutta Review": "The early settlements.....were effected in a very easy and cursory way. The Collector sat in his office at the *sadr* station, attended by his right-hand men, the *kanungos*, by whom he was almost entirely guided. As each estate came up in succession, the brief record of former settlements was read, and the.....fiscal register for ten years immediately preceding the cession or conquest was inspected. The *kanungos* were then asked who was the *zamindar* of the village. The reply to this question pointed sometimes to the actual *bona fide* owner of one or of many estates, sometimes to the headman of the village community, sometimes to a non-resident Saiyyid or Kayath, whose sole possession consisted in the levying a yearly sum from the real cultivating proprietors, and sometimes to the large *zamindar* or *talukdar*, who held only a limited interest in the greater portion of his domain. Occasionally a man was said to be *zamindar*, who had lost all connection for years with the estate.....though his name might have remained in the *kanungo's* books. As the *diata* of these officers were generally followed with little further enquiry it may be imagined that great injustice was thus perpetrated. Then followed the determination of the amount of revenue. On this point also reliance was placed on the *daul* or estimate of the *kanungo* checked by the accounts of past collections and by any other offers of mere farming speculators which might happen to be put forward at the time. Mistakes of course occurred, and it was often necessary to re-adjust the demand even during the currency of the short leases then granted; but, on the whole, this part of the system succeeded better than might have been expected."

17. Rights of peasant owners over-ridden by farmers, talukdars and *sadr malguzars*.—One great evil in these settlements was the extent to which engagements were taken from farmers. This was soon recognized to be an abuse, and was partially corrected as time went on. But a real dislike on the part of the landholders to undertake responsibility for the payment of a cash assessment frequently led to the offers of *talukdars* and farmers being accepted. Even where owners engaged, this as a rule only meant that a few of the leading landholders had been admitted as *sadr malguzars* and allowed to make what arrangements they could for collecting from their co-parceners, who were styled in the revenue literature of the day the "under-tenants." There was no record to show what the rights and liabilities of these co-parceners were. The *sadr malguzar* was called *zamindar*, and was treated as if he was the sole proprietor of the estate, however small his actual share might be. If once an engagement had been taken from him, the other landholders were only permitted to engage with his consent at a subsequent settlement. The rights of large bodies of peasant owners were thus overborne and were in imminent danger of destruction.

18. Vicious system of collection.—Bad as was the process of assessment, the means employed for collection were far worse. The most drastic process known to the Revenue Code was constantly and indiscriminately applied when villages fell into arrears, and the abuses of the sale law became the scandal of the administration. If the *sadr malguzar* made default the whole *patti* or estate for which he had engaged was put up to auction, and all private rights of ownership annulled in favour of the purchaser, who was very frequently the *tahsildar* or one of his underlings. Indeed, we are told that “by some strange misapprehension the rule applicable to cases of sale for arrears of revenue appears to have been extended not only to the sales of estates under decrees of Court for private debts, but even to the private transfers of the *sadr malguzars*.”* The powerful machinery of a civilized Government was rapidly breaking up communities which had survived the crushing exactions of the petty tyrannies which it had replaced. The extent of the evil may be gauged by the extraordinary nature of the remedy applied with very partial success in 1821. In that year a commission was appointed with power to annul, should equity require it, any public or private transfer of land which had taken place before the 18th of September 1810.

19. Over-assessment and bad revenue management in Delhi territory.—In those parts of the Delhi territory which came under our direct management during the first quarter of the century, things were not a whit better. In the 5th Chapter of the Karnal Settlement Report Mr. Ibbetson has drawn a dark picture of the gross over-assessment and fiscal mismanagement which prevailed in Panipat down to 1824, and which was only gradually corrected in the next 18 years. A similar tale of over assessment and the breaking down of villages is told in Mr. John Lawrence’s report on the settlement of the Rewari *pargana* of the Gurgaon district which he made in 1836. One reason which he gives for the imposition of extravagant demands is significant. He says:—“The *pargana* was in the first instance greatly over-assessed. The majority of the largest and finest villages were in the possession of persons of wealth and influence. . . . These people were set one against another in order to raise the revenue, and in consequence of the feuds which existed among them, this was but too easily accomplished. Each endeavoured to outbid the other and enhance the assessment of his rival. This had the effect of raising prodigiously the revenue of all these villages.”†

It was perhaps fortunate that a great part of the Delhi territory did not come under our direct revenue management till wiser methods had been learned by painful experience.

20. Holt Mackenzie and Regulation VII of 1822.—The man who more than any other drew the revenue system of Northern India out of this quagmire was Holt Mackenzie. In 1819, when Secretary to the Government of India, Territorial Department, he wrote an admirable

*Holt Mackenzie’s Memorandum, paragraph 571.

†Compare Sir William Muir’s remark as to an early settlement of part of Bandelkhand, which became notorious in the North-Western Provinces:—“The settlement of Mr. Waring resembles an auction in which the highest bidder was sure of his object.” (Muir’s Settlement Report of Kalpi *pargana*, paragraph 29).

memorandum in which he described in calm but forcible terms the failings of the past land revenue administration of the North-Western Provinces and sketched with clear insight the reforms required. His proposals were accepted and embodied in Regulation VII of 1822, which laid the foundation of the existing system of land revenue settlement in the North-Western Provinces and the Punjab, and Regulation XI of 1822, which swept away the worst features of the sale law. The main points of Holt Mackenzie's plan were a moderate assessment based on adequate enquiry, an exhaustive record-of-rights, and full protection to non-engaging members or village communities.

21. Protection of rights of peasant owners.—The last object was secured by providing that the fact that a person had not hitherto joined in the settlement lease should be no bar to his being admitted to engage in future, and by taking power in those cases in which the co-parceners did not become jointly responsible to make what we should now call a sub-settlement with them determining exactly the amounts which they should pay to the farmer, *talukdar*, or *sadr malguzar*. At the same time their interests were protected from forfeiture in consequence of the default of the *sadr malguzar*.

22. Record of rights to be framed after exhaustive local enquiry.—A very minute enquiry regarding the extent of the rights and interest of every person sharing in the ownership of the soil was to be made, and the rates of rent demandable from all resident tenants, whether possessing the right of hereditary occupancy or not, were to be carefully recorded. The Collector was given power to decide all cases connected with land brought by persons in possession of the right claimed. His decision, even when upheld by the Board of Revenue, was not indeed final, as the defeated party might bring a regular civil suit in the *zillah* Court. But an immense step forward was taken when disputes regarding rights in land were in the first instance submitted to an officer whose duties forced him to make a careful study of the peculiarities of Indian tenures, and who could hear the cases in the villages in the presence of the assembled brotherhood. It is the great merit of Holt Mackenzie's scheme that it moved every part of settlement work from the *kachahri* to the camp.

23. A moderate assessment to be based on careful enquiry.—The preamble to Regulation VII of 1822 declares that "a moderate assessment being equally conducive to the true interests of Government and to the well-being of its subjects," the officers engaged in revising the settlement were to aim not at "any general and extensive enhancement," but at "the equalizing of the public burthens." The demand was to be "fixed with reference to the produce and capabilities of the land" (section 7) and the Government share of the rental, which, following the precedent of the permanent settlement of Bengal had been fixed at 91 per cent. by Regulations IX and X of 1812 was reduced to five-sixths. This standard was, however, only to operate in case of enhancements, and any abatement of the existing demand was only to be allowed "on the clearest grounds of necessity." The data on which the assessment of an estate was based and the reasons for the actual demand imposed were to be embodied in an

English village statement,* which is the germ of our present village notebook, and in submitting these statements for confirmation, the Collector was to forward a *pargana* report stating the general results of his enquiries into land tenures when framing the record-of-rights, and the information he had acquired regarding the agriculture of the country, the condition of its inhabitants, and the character of the institutions prevailing among them.†

24. Failure of the scheme.—The plan was a masterly one, but it fell for the time being by its own weight. The procedure contemplated was much too elaborate. But in any case to make a record-of-rights for the first time in a country where the interests of different persons in the land were of so complex and often of so doubtful a character was an immense undertaking, and the task became hopeless when it was entrusted to Collectors fully occupied with the ordinary work of district administration. Ten or twelve villages were taken up at a time, and it was found after eleven years that nowhere was the settlement nearly finished, and that the periods regarded as necessary for its completion in different districts varied from three to sixty years.

25. Two ways of determining the land revenue assessment.—Nor was the assessment work practically successful. There are two ways of determining the land revenue just as there are two ways of assessing the income-tax. In both cases a standard has been fixed by Government. If the rental of the landowner or the profits of the tax-payer are certainly known the matter is simple. A Treasury Officer finds no difficulty in taxing an official's salary, and a Settlement Officer can easily assess land which is cultivated by tenants paying in cash, if the rents are honestly recorded. But accounts of the income derived from trade or from land may be untrustworthy, or so complicated that it is almost impossible to unravel them. A money-lender may receive his payments and a landlord may collect his rents in grain, and even if the amounts realized can be determined, it may be hard to calculate their real money value. In the case of land further difficulties arise when the owners themselves till most of their fields and let the remainder to tenants at rents which are customary rather than competitive. When a Collector finds it impossible to assess a shop-keeper by an examination of his books and a minute calculation of profit and loss, he resorts to a more rough and ready process. He finds out what the man has paid in former years, and enquires whether there has been any apparent change in his circumstances since the last assessment, or whether there is anything to indicate that his income has been hitherto under-estimated. Has he spent lavishly on the wedding of his son or built for himself a finer house? What is the opinion of respectable neighbours and of the officials who are personally acquainted with his circumstances as to the amount of taxation which he may fairly be called upon to pay? A similar process may be followed in assessing the land revenue of an estate, though the enquiry in this case is naturally much more complicated. An assessment then may be based either on an attempted calculation of net assets or on what are called "general considerations." Or both processes may be followed and the result of the one used to check the result of the other.

*Holt Mackenzie's Memorandum, paragraph 687.

†Holt Mackenzie's Memorandum, paragraph 689.

26. In settlements under Regulation VII of 1822 assessment proposals supported by elaborate attempts to calculate net assets.—In the third decade of the century cash rents were apparently by no means uncommon in the North-Western Provinces, but the record of them by the *patwaris* was untrustworthy.* Assessment proposals were not based on rent data, but were supported by elaborate but unconvincing calculations of the gross produce and its value, and after deducting from this the wages of labour, the profits of stock, and the percentage of the net assets allowed by the law to the landowners, the residue was assumed to be the share of Government. To quote again from the paper of Mr. John Thornton referred to in paragraph 16 :—

“ Too much detail was required on all points. In determining the revenue especially broad principles were liable to be lost sight of in the intricacies of a laborious calculation. Arbitrary rates were applied to innumerable arbitrary gradations of soil. No positive objection could be made to any step of the process, but no faith could be placed in the result.”

27. Regulation VII of 1822 amended by Regulation IX of 1833.—When Regulation VII of 1822 had been in force for eleven years an amending Act, Regulation IX of 1833, was passed. This is the law under which the Punjab settlements, before the passing of the first Land Revenue Act, XXXIII of 1871, purported to be made.† It would have been more correct to say that they were made under Regulation VII of 1822 as amended by Regulation IX of 1833. The main provisions of the new law rescinded “ so much of Regulation VII of 1822 as prescribed or has been understood to prescribe—

- (a) that the amount of *jama* to be demanded from any *mahal* shall be calculated on an ascertainment of the quantity and value of actual produce, or on a comparison between the cost of production and value of produce ; ” and
- (b) that the judicial investigation of claims connected with rights in the land shall be conducted simultaneously with the assessment of the revenue.”

For the future the Governor-General in Council was to determine the order in which these matters should be disposed of.

28. Bird's influence on settlement policy.—In the next eight years the revision of the settlement of the North-Western Provinces was nearly completed. During this period Robert Merttins Bird was the Member of the Board of Revenue in charge of settlements, and he stamped his own ideas on the young Settlement Officers whom he chose, and through them on the work. Four at least of the men who moulded the early settlement policy of the Punjab, Lawrence

*Sir Auckland Colvin, writing in 1872, thought that even between 1822 and 1833 assessments could have been based on rents. “ Eleven years, from 1822 to 1833, have already been consumed in attempting by elaborate calculations to ascertain what the landlord's assets should be. It was not till nearly 1833 that it occurred to the Government to ascertain what the assets actually were.” (Memorandum on the Revision of Land Revenue Settlements in the North-Western Provinces, paragraph 1.)

†Strictly speaking Regulation VII of 1822 and Regulation IX of 1833 were not in force in the Punjab.

Montgomery, Edmonstone and Thornton, learned in his school, and with Donald McLeod, George Barnes, Charles Raikes, John Morris, and Richard Temple, served under his most distinguished pupil in revenue matters, James Thomason who became Lieutenant-Governor of the North-Western Provinces in 1848. Thomason's relation to Bird is well expressed by Sir Richard Temple in his sketch of Thomason's life (pages 86, 87) :—

(Bird) "was the forerunner into whose labours Thomason entered, the pioneer, the originator, the inventor, whose work Thomason took up, carried on to its conclusion and rendered fully effective." Bird's own description of his system is contained in the Settlement Circular issued by the Board of Revenue in 1839, which is the first of the four Circulars referred to in Lord Dalhousie's despatch. But it will be better to draw our account of the scheme from the masterly exposition of it given by Thomason in the "Directions for Settlement Officers." Few Punjab officers probably referred to the Circular, but all studied the "Directions."

29. Survey and record of rights.—All settlements were to be made and reported on separately for each *pargana*. The first operation was the laying down of village boundaries, a matter in those days often of great difficulty and one of the first importance for the peace of the country. As soon as this was effected the topographical survey of the villages by the professional Survey Department on the scale of four inches to the mile could proceed. The Survey Officer also superintended the cadastral or field survey made by *amins* after the native fashion, but the maps (*shajras*) and field registers (*khasras*) which they prepared were also checked by the Settlement Officer and his subordinates. The contents of the settlement records were not very different from those of the records afterwards framed in the Punjab under Act XXXIII of 1871.

30. Assessment based mainly on general considerations.—The Circular and the "Directions" both contemplate an assessment based mainly on general considerations. The proper demand for each *pargana* was to be determined by a careful enquiry into the resources and past revenue history of the estates comprised in it more than by any elaborate attempt to ascertain the net assets of the landowners and take a definite proportion thereof as the Government share.*

31. Thomason's plan of assessment.—This fact is obscured by the additions made to the text of the "Directions" in the Punjab edition prepared by Mr. Barkley in 1875. It is well, therefore, to quote from the edition published in 1850.

Paragraph 47.—"The object of the fiscal part of the settlement is to fix the demand... for a certain period of years within such limits as may leave a fair profit to the proprietors and create a valuable and marketable property in the land."

Paragraph 48.—"This end cannot be attained with certainty by any fixed arithmetical process or by the prescription of any rule that a certain portion of the gross or net produce shall be assigned to the Government and to the proprietors."

*More attention, however, seems, in fact to have been given to the collection of rent data and the calculation and rent rates than the extracts given in paragraph 31 would lead one to suppose.

Paragraph 49.—"If the net produce of any one year or any given number of past years could be determined, it would afford no certain guide to the produce of years to come. The future produce may be more, if there is waste land to come into cultivation, if the former system of cultivation were faulty and expensive, if the products are likely to come into demand in the market, or if the opening out of new channels of commercial intercourse is likely to improve the local market. The future produce may be less, if the reverse of all these is the case."

Paragraph 50.—"Not only would the actual ascertainment of the net produce of an estate be a fallacious basis on which alone to found any certain determination of the demand, but it is in itself often most difficult to accomplish, and the attempt to effect it is likely to produce many serious evils. In villages where the collections are in kind, or where the proprietors cultivate themselves and pay the *jama* by a *bachh* or rate upon their *sir* land, it is almost impossible to ascertain either the net or gross produce with any certainty. When once it is known that the Government demand is to be limited to a fixed portion of the proved produce there is a general combination to deceive and mislead the Settlement Officer. Village accounts are forged or the true ones suppressed, falsehood and perjury are unhesitatingly resorted to." * * *

Paragraph 51.—"Still the Settlement Officer should not neglect any opportunities that present themselves for ascertaining the net produce of every estate for a single year or for any series of years, but he should not harass himself to attain accuracy in this respect, nor, when he fancies that he has ascertained the actual net produce, should he treat this as any certain basis on which to found his settlement. It is better to acknowledge at once that the operation is not one of arithmetical calculation but of judgment and sound discretion, and to proceed openly on that assumption. It is necessary therefore to point out the object which the Settlement Officer should keep in view and the means which he has for attaining the proposed end."

32. Standard of assessment and assessment guides.—Thomason went on to say that Government should not demand more than two-thirds "of what may be expected to be the net produce to the proprietor during the period of settlement." The five-sixths net assets standard laid down in Regulation VII of 1822 was still in force when the Settlement Circular of 1839 was issued. But it was lowered to two-thirds in the first edition of the "Directions for the Settlement Officers" which appeared in 1844. After declaring the standard of assessment and giving a definition of net produce which is substantially the same as that of net assets in the Punjab Settlement Instructions of 1893 (see Appendix I) Thomason proceeded:—

Paragraph 53.—"In order to enable him to come to a correct opinion on the subject, the Settlement Officer has an accurate return of the cultivated and cultivable area of the village, of the irrigated and unirrigated land, and of the different kinds of soils. . . . Except in a newly acquired country the Settlement Officer has also the experience of past years to guide him, and this should always be insured by memorandum from the office, not only of past settlements and collections, but also of everything bearing on the condition of the village, such as previous litigation. . . . price

realized if ever brought to sale, mortgages, farming leases, &c., &c. He may also know pretty nearly the net produce or gross rental of the village under settlement, or of several in the same tract with which he may compare it. He knows the character of the people, the style of cultivation, the capability of improvement, the state of the market for the produce. He has to aid him the experience of past years, the opinions of the *pargana* officers, and the estimate of neighbouring *zamindars*."

Paragraph 54.—"All this information he will lay himself out diligently to collect by personal inspection of the country, by free communication with the people, and by careful enquiry from every person and in every quarter whence he is likely to derive information. Such of his information as is capable of being exhibited numerically and compared he will reduce to a tabular form in such manner as is best calculated to bring the corresponding facts well under his eye together. He will group the villages in his table according as he may find them placed in similar circumstances or subject to similar influences."

Paragraph 55.—"Great assistance may be obtained from the following process. A rough *pargana* map is formed..... Upon this map the Settlement Officer before commencing his assessment notes down the rate at which the old *jama* falls on each village, so that a single glance may show where any discrepancy exists in the rates paid by neighbouring villages. On such a map, moreover, lines may be drawn or colouring used to point out where any marked change takes place in the quality of the soil; for instance, where the low and moist *khadir* ceases and the high *bangar* begins, or where the level and uniform plain rises into an uneven and sandy tract, the number and depth of the wells, population, and numerous other interesting and important particulars may be noted within the area of each village in the map. A map thus prepared and gradually completed during the period that the Settlement Officer is making his personal survey of the *pargana* cannot fail to be of the greatest use in fixing the future assessment."

Paragraph 58.—"The Settlement Officer will find it prudent not to fix his demand finally at once, but having roughly assumed at first what seems in each case to be fair, thence to determine the new *jama* of the *pargana* by taking the total of these, and then by the reverse process to re-distribute either himself or by the help of others the *pargana* total over the several villages. Respectable *zamindars* may often be advantageously consulted on the comparative assessment of two villages with which they have no concern. In the end he will propose the result of his deliberations to the proprietors themselves and be guided in his ultimate decision by the circumstances under which they may accept or reject his terms."

33. Warnings against probable mistakes in assessment.—Mr. Thomason proceeded to offer some general warnings which may be thus summarized:—

- (1) It is a more fatal error to over-assess than to under-assess.
- (2) Too much stress should not be laid on the former assessment of, or even the former collections from, an estate.
- (3) It must not be too readily assumed that the demand is fair because the proprietor accepts it.

- (4) Too great a desire to maintain equal averages is a mistake.
- (5) Good and bad cultivators cannot be assessed alike, but there is a strong tendency to assess the former too heavily and to let off the latter too easily.
- (6) Caution is required against increasing the demand too rapidly.

34. Character of first N.-W. Provinces settlement under Regulation IX of 1833.—The first series of settlements made in the North-Western Provinces under Regulation IX of 1833 were far better than any that had preceded them. Their defects were such as resulted naturally from the attempt to carry out very rapidly a difficult and complicated piece of work. The survey maps were usually mere skeleton plans without topographical details, and the *shajras* were rough and the records often imperfect. But the rights of the great body of peasant owners were for the first time defined and safeguarded. Mr. Vincent Smith, in his Settlement Officer's Manual for the North-Western Provinces, writes with reference to the assessments :—

“There was little or no real enquiry into the real rental assets of the time.....Mr. Thomason indeed formally declared that ‘it is impossible to fix what is the fair share of the assets of a *mauza*, which should be taken as the Government demand.....The Government *jama* is not necessarily a definite portion of the assets’.....Many officers, therefore, working on the principle thus frankly expounded, though, in accordance with the rules of the Board of Revenue, they framed sets of rent rates, in practice utterly disregarded their rates and assessed without regard to the valuation obtained by applying the rates; and some officers who did so, for example, Messrs. Muir and Allen in Bundelkhand, were among the most successful. But many officers made use of the rates arrived at by summary inquiry and were misled by them.*

35. Settlements in Delhi territory now included in Punjab.—

In the settlements of the districts included in the Delhi territory made between 1837 and 1844 no attempt was usually made to frame rent rates, for the simple reason that rents hardly existed, tenants then and for long after paying a rateable share of the Government demand just as if they had been owners. In Rewari indeed John Lawrence assumed rent rates, but he remarked that “the rent and the revenue is (*sic*) so mixed up that it is difficult to ascertain with that degree of accuracy, which would serve any practical purpose, what should be estimated as one and what the other.” His description of the way in which he actually made his assessment is interesting: “After examining all the villages I classed them into such as were considered highly, moderately, and lowly assessed, and by a rough calculation of the probable increase and decrease in the first and last was enabled to determine the proper *jama* for the whole *pargana*. Having fixed rates for each class of soil and irrigation into which the land had been divided, and having ascertained that the value of the whole did not exceed the proposed *jama*, I applied the rates” (to the areas of the different estates).

*I have allowed this quotation to stand, as it is taken from a work of authority, but the late Sir William Muir informed me that rent *data* formed a much more important element in these settlements than Mr. Vincent Smith's statements imply.

“The result enabled me to correct my rates until I obtain such as applied fairly to villages moderately assessed, and by them the assessment of all the *mauzas* was finally calculated.” This is exactly the method recommended by Bird in the Settlements Circular of 1839. The general result of the Settlements in the Delhi territory was a large reduction in the demand.

36. Term of settlement.—The term of most of the North-Western Provinces settlements was fixed by Act VIII of 1846 at thirty years or upwards. The only exception among districts now included in the Punjab was Mr. Brown’s settlement of Hissar, of which the term was twenty years.

37. Main features of settlement policy received by Punjab from N.-W. Provinces.—The main features of the settlement policy which the Punjab received from the North-Western Provinces were :—

- (a) A proper field survey with the results embodied in a map and field register.
- (b) A full enquiry into the rights and liabilities of all persons having an interest in the soil, and the record of these rights and liabilities in permanent registers.
- (c) A moderate assessment based more on general considerations than on an attempt to deduce the demand from an exact calculation of the landlord’s net assets and the share thereof claimable by Government.

CHAPTER IV.—The Sikh Revenue System.

38. Land revenue under the Sikhs.—Before sketching the growth of Punjab settlement policy it will be well to give a brief account of the Sikh revenue system. The Sikhs usually took a fixed share of the produce from the cultivators except in the case of crops, such as sugarcane, cotton, and tobacco, which could not conveniently be divided and for which money rates were charged. This is equally true of the ruler of the Punjab and of the pettyest Sikh Chieftain to the south of the Sutlej. Instead of actually dividing the grain at the threshing floor (*batai*) the plan of appraising the State's portion of the outturn by inspection of the crop (*kan* or *kankut*) was often adopted, and it was common for the officials who collected the revenue to oblige the cultivators to purchase the Government share at prices in excess of the market rates. In the Punjab between the Indus and the Sutlej, except in the territory governed by Diwan Sawan Mal, the State claimed from one-third to two-fifths of the crop, but for land with good natural advantages as much as one-half was taken. At least these were the recognised rates, and the villagers had to bribe the appraising officers to take less. The rates in the Cis-Sutlej States were lower on the whole. The demand was increased by the levy of numerous cesses (*abwab*), of which formidable lists are given in some of the old settlement reports. Practically no margin was left for rent, and *qvoad* revenue cultivators of all classes were in a large part of the country treated alike, except a few leading men in each village, whose services were secured by giving them under the name of *inam* cash allowances, or a percentage of the ruler's share of the produce, or lower rates of *batai* for their own fields, or grants of land. In some parts of the province, however, the Sikhs had, especially when they tried cash assessments, to allow the leading men or *maliks* to engage, and the distinction between landowner and tenant was a real one. Joint responsibility for the payment of the revenue was not enforced. The revenues of villages and even of large tracts were sometimes leased at fixed sums to farmers, and there were many large *jagirs*. Farmers and *jagirdars* were left to make their own arrangements with the cultivators. Cash assessments were occasionally made, the most famous being the very equitable one introduced by Misr Rup Lal in the two plain districts of the Jullundur Doab which he governed from 1882 till Ranjit Singh's death in 1889.

39. Their administrative system.—Under such a system everything depended on the local governor or *nazim* and the *kardars* under him. So long as he sent enough money to Lahore there was little enquiry as to his methods of Government. Mr. Barnes' description of the Sikh administration of Kangra is worth quoting :—

“ The *nazim* was not only intrusted with the entire receipts..... but he was likewise responsible for all disbursements ; the fiscal, military, and miscellaneous charges were all paid by his authority out of the gross income. There was no stated time for rendering.....accounts to the State, sometimes two or three years would.....elapse before

he was called upon to give an explanation of his stewardship. But he was obliged to be always prepared to give up his papers and to pay the balance whenever Government might demand an adjustment..... Over every *pargana* was appointed a *kardar*, who.....derived his appointment from the *nazim*.....Sometimes (the *kardars*) undertook the farm of their several jurisdictions.....taking their chance of remuneration in the opportunities for extortion which their position conferred upon them. In such a case the *kardar* held himself responsible for all the collections and disbursements,.....the people were literally made over for a given period to his mercy, and the rapacity of the *kardar* was limited only by his discretion. In most cases the *kardar* received a personal salary of Rs. 700 or Rs. 1,000 a year.....Of course the mere pay was not the only inducement to accept office. Under every native Government there are certain recognized perquisites.....which are at least equivalent to the fixed emoluments, and under so lax a system the official was moderate indeed who did not overstep these reasonable limits.....A *kardar* seldom stayed more than three years. He obtained his office probably by the payment of a large propitiatory bribe, and the same agency by which he had succeeded in ousting his predecessor was open to others to be directed against himself. Occasionally the people would repair in formidable bodies to Lahore and obtained the removal of an obnoxious *kardar*.....The *kardar* was a judicial as well as a fiscal officer.....Of course his fiscal duties were the most important.....His chief business.....was to collect revenue, and his daily routine of duty was to provide for the proper cultivation of the land, to encourage the flagging husbandman, and to replace, if possible the deserter. His energies were entirely directed towards extending the agricultural resources of the district, and the problem of his life was to maintain cultivation at the highest possible level, and at the same time to keep the cultivator at the lowest point of depression." (Barnes' Settlement Report of Kangra paragraph 326 *et seq.*)

40. Diwan Sawan Mal's revenue system.—Diwan Sawan Mal was the greatest of the Sikh governors and a revenue farmer on a very large scale, paying into the Lahore treasury nearly twenty-two lakhs for the territory subject to his control, which embraced the present districts of Multan, Muzaffargarh, and Dera Ghazi Khan, and parts of Montgomery, Jhang, and Dera Ismail Khan. He was an oriental ruler of the best type, and did much to restore to prosperity a country which had been desolated by a century of anarchy. He induced the people to combine to dig new, and restore old, canals, and brought in cultivators from neighbouring States. He encouraged the sinking and repair of wells by giving favourable leases. A man who constructed a number of wells and settled cultivators was rewarded by being allowed to hold the whole area of one well or a part of the area of each well revenue free. Following the example of the Muhammadan rulers who preceded him in Multan, Sawan Mal levied a fixed cash assessment on each upland well. For wells and *jhalars* in the riverain tracts leases for a fixed cash demand were sometimes given, but even then the finest crops, such as cane or indigo, paid special rates. A normal well area was fixed according to the circumstances of each locality, and any cultivation in excess of that limit was charged for at a fixed money rate

per *bigha*. In some places the demand varied according to the number of oxen employed on the well and was remitted when the well was deserted. For flooded lands a moderate share of the produce was taken in kind or occasionally cash crop rates were charged. The measurements were made at the time of harvest and the rates were levied on ripened crops. The share of the State was pitched especially low in the case of new cultivation. The Diwan's system was well suited to the agricultural conditions of the country under his rule, and it is interesting to note that experience has led us there in many cases to methods of assessment very similar to those which he adopted.

41. Measures taken to extend cultivation.—The Sikhs were anxious to increase the revenue by extending cultivation and at the same time to diminish the influence of the ancient landowning tribes and ruling families. With these objects they effected in some parts of the country a great, and on the whole beneficent, revolution in landed property by founding in the extensive waste lands of the older estates numerous settlements of industrious cultivators of lower castes. The conflicting claims of the old lords of the soil and the new land-holders raised difficult questions when our first records of rights were framed.

CHAPTER V.—Summary Settlements.

42. Early summary settlements.—In the Cis-Sutlej States when the villages held by any chief lapsed for want of heirs they were summarily assessed for short periods. These settlements were generally most oppressive. This is not wonderful, as the common way of making them seems to have been to calculate the average money value of the Sikh collections for a short term of years, and, after striking out the cesses and allowing a deduction of 5 per cent. for *inam*, to take the balance as the Government demand. It was not realized that a fixed cash assessment must be far lower than revenue paid by division of crops and therefore fluctuating automatically with the character of the seasons. The revenue management was extremely bad, and excessive demands were wrung from the people by harsh and often illegal methods. The summary settlements of the Jullundur Doab made in 1846 by John Lawrence and his Assistants were much more reasonable, especially in the two plain districts where the Settlement Officers were a good deal influenced by their knowledge of the success of Misr Rup Lal's assessments. Nearly the whole of the Punjab, west of the Beas, with the exception of the districts included in the Governorship of Diwan Sawan Mal and his successor Diwan Mulraj, was summarily settled in the cold weather of 1847-48 by the Assistants of the Resident at Lahore. The work was done hastily by young officers with no previous settlement experience, with no measurements to help them, and with only such local knowledge as they could gain in the course of hurried tours. The collections of the past years as shown in the Darbar accounts were taken as the main guide to the amount of the new assessment, but abatements of varying amount were allowed. The districts, which had not been assessed before the outbreak of the second Sikh war, were put under summary settlement shortly after annexation. These assessments were makeshifts at the best, and though they were on paper at least a good deal lighter than the demands which they superseded, they broke down with the extraordinary fall of prices which began in 1851. The establishment of a strong Government and a succession of very favourable seasons gave a great impetus to cultivation, and this was increased by the return to the plough of the soldiers of the Khalsa army. Grain in consequence became a glut in the market. In 1851 and 1852 wheat fetched only half as much as the average price of the five years before annexation.

43. Later summary settlements.—In 1852 and the next few years it became necessary to revise the summary settlements in districts in which the operations of the first regular settlement had not been started, as the demands first imposed could not be maintained in the face of the heavy fall of prices. In some districts a third summary settlement was made, in Peshawar there were even four, the last of which, though only made for five years, continued in force for eighteen. For many years it was considered inexpedient to put the frontier districts under regular settlement, and Muzaffargarh was treated in the same way. The last district to be placed under regular settlement was Simla (1881—1884).

44. Difference between summary and regular settlements.—

A summary settlement is defined in the first Land Revenue Act, XXXIII of 1871, as "a provisional settlement made pending a first regular settlement." Legally the chief difference between the two lies in the fact that no presumption of truth, such as is attached to entries in records-of-rights prepared at regular settlements (section 16 of Act XXXIII of 1871), belongs to similar entries made at a summary settlement. An officer making a record-of-rights at a first regular settlement could alter any entry made at a summary settlement simply on the ground that he considered it incorrect. An officer making a re-settlement under Act XXXIII of 1871 had no such power with reference to the entries in records-of-rights framed at a first regular settlement (section 19 of Act XXXIII of 1871). In some of the summary settlements there was not even the roughest sort of *khewat* to show how the revenue was distributed over holdings, in most there was no attempt at a field measurement. Some of the later summary settlements on the other hand were much more elaborate proceedings. There was, for example, little to distinguish such a summary settlement as Captain Hector Mackenzie made of the Leiah and Bhakkar *tahsils* in 1862 from a regular settlement.

CHAPTER VI.—Development of Settlement Policy in the Punjab.

45. History of Punjab settlements divided into five periods.—

The history of Punjab settlements during the past fifty years may be roughly divided into five periods. The first extending from 1846 to 1863 begins with the settlement of the districts in the Cis-Sutlej and Trans-Sutlej territories after the first Sikh war and ends with the appointment of Mr. Edward Prinsep as Settlement Commissioner. The second covers the years 1863—1871, during which Mr. Prinsep held that office, and terminates with the passing of the first Land Revenue Act, XXXIII of 1871. The third occupies the years 1871—1879, during which Sir James Lyall was Settlement Commissioner. The fourth lasting from 1879 to 1889 is marked by the changes in settlement and revenue procedure introduced by the late Colonel Wace as Settlement and Financial Commissioner, and finally embodied in the second Land Revenue Act and the rules under it. The fifth extends from 1889 to the present day. As Financial Commissioner from 1879 to 1883 and as Lieutenant-Governor from 1887 to 1892, Sir James Lyall directly controlled the settlement policy of the province, and the influence of his views was strongly felt throughout the fourth and fifth periods.

I.—First period of Punjab Settlement, 1846—1863.

46. Settlements made in first period.—During the first period the whole of the territory included in the Punjab before the Mutiny, with the exception of the Simla and Muzaffargarh districts and the six frontier districts, was put under regular settlement. The settlements east of the Beas and Sutlej except that of Ferozepore were all begun before, and finished soon after, the final overthrow of the Sikh Government in 1849. The work in the districts in the centre and south-west of the province was completed before or shortly after the Mutiny. In the north-western districts it was greatly retarded by the events of 1857, and the settlements of Rawalpindi and Jhelum were not reported till 1864, while that of Shahpur lingered on to 1866. Of the districts transferred from the North-Western Provinces after the Mutiny, Hissar was re-settled and Sirsa settled for the first time during this period. Several of the settlements were made by officers who were carrying on at the same time the ordinary administration of their districts.

47. Terms for which settlements were made.—Following the example of the North-Western Provinces, a term of thirty years was granted in the districts east of the Beas and Sutlej, except in Kangra, Hissar and Sirsa, where it was considered inexpedient to fix the demand for more than twenty years. Lord Dalhousie, looking for a rapid growth of the resources of the country, wisely ordered the settlement of the districts west of the Beas to be made for ten years only. Some of the settlements effected towards the close of the first period were, however, sanctioned for somewhat longer terms, and in few, if any, of the districts was the currency of the first regular settlement actually limited to the short period originally intended.

48. Assessments based on general considerations.—The assessments were to a still greater degree than those made in the North-Western Provinces after the passing of Regulation IX of 1833 based on general considerations. The standard of assessment was recognized to be two-thirds, and at the end of the period one-half, of the net assets. Mr. John Colvin, the Lieutenant-Governor of the North-Western Provinces, reduced the standard thereto "about one-half" in 1855,* and this change was accepted a few years later as applicable as a matter of course to the Punjab also.† But the assessments were not founded on any attempt to determine with exactness by the help of rents what the amount of a standard revenue demand really was. Rents, which in the settlement literature of the day meant cash rents, were common enough in the North-Western Provinces, but it was considered impossible to get a trustworthy record of them before the announcement of the new assessment,‡ and rent rates were therefore sometimes of little value. In the Punjab officers excused themselves from calculating "rent rates" at all, because rents hardly existed. Rents taken by division of crop were in many places, though not everywhere, clearly the creation not of ordinary economic causes, but of the recent action of the State in substituting a fixed cash assessment for a fluctuating share of the produce. The dues which the landowners received from their tenants were simply the equivalent of the revenue in grain which the Sikh *kardars* had taken from the actual tillers of the soil. Hence they were not looked upon as rents in the true sense of the word, and, when produce estimates were framed, a fraction of the gross produce, generally one-fourth, was assumed as the share of Government throughout a whole district with small reference to the varying *batai* rates which actually prevailed. But many officers did not think it necessary to frame any such estimates, and their failure to do so was not regarded as a matter of any moment by the controlling authorities. Sir John Lawrence ordered their preparation in the Montgomery settlement (1852—1858) to be stopped. At the very end of this period Sir William Davies in Shahpur drew up village produce estimates exactly on the present lines, but the Commissioner, Mr. E. L. Brandreth, thought that this was a fallacious method of estimating the rental; the Financial Commissioner, Colonel Lake, remarked that "in working out a produce *jama*, or an assessment based upon the estimated yield of the land, gross errors are likely to be made, and the result thus obtained is chiefly of use for testing and correcting the estimates formed by independent enquiries conducted in other ways"; while the Lieutenant-Governor, Sir Donald McLeod, "seeing how liable to error are all the detailed methods of ascertaining net proceeds," thought that perhaps the best criterion of Captain Davies' settlement was to compare it with those made in other tracts, remembering the special circumstances of the parts of Shahpur which he assessed. Thus where a produce estimate was framed it was only treated as one test among several, and by no means the most.

*See Rule XXXVI of the Instructions for the revision of the settlement of the Saharanpur district. Some of the more important of these rules and of the Gurakhpur instructions issued in 1856 are quoted in Appendix I.

†Financial Commissioner's Book Circular LII of 1860, paragraph 7, and Financial Commissioner's No. 3229, dated 17th September 1864, to the Settlement Commissioner.

‡See correspondence between Board of Revenue and North-Western Provinces Government quoted on pages 147—150 of "Directions for Settlement Officers," edition of 1858.

important test, to apply to the proposed assessment. The difference in the value of the various classes of land was determined by enquiry from the landowners, by reference to any cash revenue rates used by the Sikhs, and sometimes by the making of a few experimental cuttings.

49. Soils and assessment circles.—In framing revenue rates regard was rarely paid to natural varieties of soil. Lands were merely classed according to their adventitious qualities as well-irrigated or canal-irrigated, flooded or dry. But assessment circles were smaller than at present, and estates within circles were often arranged in several classes. This device of classes within circles was held to be open to considerable objection, but it had at least the result of indirectly recognizing soil distinctions.

50. Assessment guides.—Great stress was laid on the working of the summary settlements. Villages were sometimes grouped with reference to their past revenue history as highly, moderately, and lightly assessed. The rates paid by estates of the second class gave a clue to the rates which would probably be suitable as general average rates. The opinions of native officials and of respectable landowners were weighed, those of the latter being considered specially useful as regards the distribution of the gross assessment over estates. Statistics of cultivation, irrigation, population, ploughs, wells, and other matters throwing light on the economic condition of each estate and circle were tabulated. Towards the close of the period the statistical enquiry became under Mr. Prinsep's influence exceedingly thorough, and elaborate tables and maps were prepared with the object of furnishing the assessing officer and his superiors with a complete comparative view of the state of different villages and circles.

51. Assessment of different classes of land.—The importance of testing the real capacity of the wells and not trusting to the *khassra* entries for the determination of the irrigated area was early recognized,* but the means for reaching accurate conclusions on the subject which we now possess in a continuous record of crops did not then exist. Of the present perennial canals the only one at work was the Western Jamna Canal, the irrigation from which was almost entirely confined to the districts of the Delhi territory, which remained part of the North-Western Provinces down to 1858. The old Hasli Canal in Gurdaspur had not yet been superseded by the Bari Doab Canal. On the lands watered by the Western Jamna Canal fluctuating water-rates† were levied, but the *nahri* land revenue assessment was fixed. In fact under the contract system‡ the demand for water-rates in many estates was also fixed for a series of years. On the Inundation Canals in Multan an approach was made to a fluctuating assessment by making part of the revenue of canal villages remissible, the intention being that, in case of a failure of supply in any canal, a general remission at so much per cent. should be given in all the estates which it watered. In Montgomery Mr. Vans Agnew wished to make the *nahri* assessment fluctuating, but was

*See, e.g., paragraph 19 of Chief Commissioner's Review of Ludhiana Settlement Report, page 63 of Extracts from Reports on the Settlement of the Thanesar district, and page 22 of Davies' Amritsar Settlement Report.

†Corresponding to the present occupier's rates, see Chapter XXVI.

‡Report of Irrigation Commission (1901—1903), paragraph 270.

over-ruled. The demand was divided "between land rent and *abiana** in such proportion as to represent with approximate correctness their relative values, the assessment being at the same time fixed at so moderate an amount that no reduction of *abiana* should become necessary in ordinary years," an arrangement which speedily broke down. Proposals for a fluctuating assessment of flooded lands in Multan and Montgomery, which later experience has shown to have been sound, were rejected in favour of a light fixed demand tempered by annual alluvion and diluvion assessments. In this, as in some other cases, ideas brought from the North-Western Provinces proved stronger than local facts.

52. Character of the assessments.—In the first regular settlements the demands imposed at the summary settlements were generally much reduced. The first administrators of the Punjab were familiar with the great evils which had sprung from over-assessment in some of the districts of the North-Western Provinces, and were therefore pre-disposed to moderation. The low range of prices from annexation down to the famine of 1860-61 subjected all our early assessments to a very severe strain, and the development of the country was less rapid than sanguine officials had expected. In 1856 John Lawrence, when reviewing the state of the revenue administration,† remarked :—

"Moderation of demand is not only due morally and actually to the people, but is also conducive to the best interests of the Government The Chief Commissioner would entreat all the revenue officers to recollect that the same causes which heretofore have necessitated moderation of assessment, namely, low prices, concentration of industry upon the land alone, excess of production over consumption, cessation of service and such like employments, the want of markets, the unavoidable subtraction of cash from the country at the very time when money payments of the revenue are in vogue, are still in operation and may probably so continue."

The drift of opinion towards great moderation in assessment became still more marked after the Mutiny and the famine of 1860-61, and its strength may be gauged by the sweeping remark of the Financial Commissioner, Mr. Robert Cust, when reviewing the Multan Settlement Report in 1860, that "our Punjab settlements have all been pitched too high." To most it seemed that great leniency in fixing the land revenue demand was the best means to secure the quiet and contentment of the country, but the contrary view that higher assessments would not really injure the mass of the peasant owners, and would enable us to conciliate their natural leaders by more liberal *jagirs* and *inams*, was not without its advocates.‡

53. Supervision of settlements.—By orders issued in 1851 the Board of Administration required Settlement Officers to report separately on the assessment proposed for each *tahsil*. In this way, they remarked,

*i.e., water-rent or revenue (see paragraphs 60—62 below).

†Chief Commissioner's No. 799, dated 9th September 1856, to the Financial Commissioner.

‡See Mr. Arthur Brandreth's Settlement Report of Jhelum, paragraphs 190-91, and Mr. E. L. Brandreth's Review of it, paragraphs 32-33.

“the Commissioners and the Board would be able to exercise a more satisfactory supervision over the work.” Commissioners might allow one harvest after the introduction of the new demand to elapse before reporting to the Board. These orders were constantly neglected.* It seems clear that the Board, or, after its abolition, the Financial Commissioner, was rarely asked to sanction an assessment till the final settlement report of the whole district was received, and the new demand had sometimes been in force for years before the Settlement Officer found time to write his report. The papers sent up with the *tahsil* reports were a volume of survey maps (No. 1), a file of village note-books (Nos. II to IV), and three general statements or village lists (Nos. V to VII) for the whole *tahsil* giving details of areas, tenures, and assessments. The remarks of the Settlement Officers on the grounds of his assessment were appended to Statement III in the village note-book. A supervising officer who wished to exercise any check by means of these papers must have relied largely on his power to refer to these remarks. Statement V formed a sort of index to direct his attention to estates in which the proposed demand fell at an exceptionally high or low rate on cultivation. The elaboration of settlement statistics was begun by Mr. Prinsep, when he was Settlement Officer of Sialkot (1851—1856).

54. Judicial part of settlements.—The judicial part of these settlements, by which is to be understood the determination of the rights of all persons interested in the soil, was quite as important as the fiscal. But any remarks required under this head, and regarding the field survey and the contents of the record-of-rights, will be reserved for the chapters treating generally of these subjects.

II.—Second period of Punjab Settlements, 1863—1871.

55. Sources of information as regards second period.—The chief sources of information for the second period are the final reports of the settlements of Lahore, Gujrat, and Gujranwala by Mr. Saunders and Captains Waterfield and Nisbet, the portion of Mr. Purser's Montgomery Settlement Report which deals with Mr. Roe's assessment of the two Ravi *tahsils*, certain printed selections (New Series, Nos. 12, 13 and 14) from the records of the Financial Commissioner's office, and some circulars issued by Mr. Prinsep as Settlement Commissioner, especially one entitled “Paper showing how a system of assessment can be adopted in districts where no rent rates prevail.” To these may be added the report on the first regular settlement of Sialkot written by Mr. Prinsep in 1863. Of the revised settlement of Amritsar, Gurdaspur, and Sialkot he never furnished any final reports.

56. Settlements effected.—Mr. Prinsep became Settlement Commissioner in 1863. He had the immediate direction of the revised settlements of Amritsar, Gurdaspur, and Sialkot, with Assistants working under him, and the control of the revised settlements of Lahore, Gujranwala, Gujrat and Montgomery, to which separate Settlement Officers were appointed. During this period a revision of the records-of-rights in Kangra was effected by Mr. J. B. Lyall, and the first regular settlements of Hazara and Peshawar were begun by Captain Wace and Captain Hastings.

*Cust's Revenue Manual, page 86.

57. Policy of lenient assessments.—As noted above, the current of opinion had set strongly in favour of very lenient assessments. The country was on the eve of a great development of trade and an extraordinary rise in the money value of agricultural produce, but at the time it was doubted whether any very large increase of revenue was likely to be secured in future, and the main object was to keep the country quiet and content and to encourage agricultural improvements. The policy of making settlements permanent in well-developed tracts was under discussion, and had been accepted in principle by the orders issued by the Secretary of State in 1862.*

58. Mr. Prinsep's views regarding well assessment.—Mr. Prinsep when engaged on the first regular settlement of Sialkot had been much struck with the expense and risk involved in well-irrigation. He held that we had inherited from the Sikhs a tendency to over-assess irrigated lands, and that this amounted to unfair taxation of capital expenditure, and operated as a bar to extensions of irrigation by private enterprise, which would be the best safeguard against famines such as that which had recently desolated the country. Reliance on survey *data* as a means of determining the irrigated area led to much inequality and hardship, the usual result being an over-estimate of the capacity of the wells. The State had a right to assess water as a cause of increased fertility when it became available for use just as it had a right to assess any inherent quality of the land. But the demand must be very light, otherwise capital would be taxed, and improvements discouraged. These were the root ideas of Mr. Prinsep's *abiana* system to be presently described.

59. Change of system required in assessing canal lands.—At the same time, it was necessary to decide how the rapidly extending irrigation from the new Bari Doab Canal should be dealt with, and in this matter Mr. Prinsep was influenced by the discussion as to the treatment of irrigation from the Ganges Canal, which was being carried on simultaneously in the North-Western Provinces in connection with the proposed permanent settlement.† Here no question of taxing the capital expenditure of the landowner arose. The tendency of the system in force on the Western Jumna Canal was to compel Government to go on supplying water to any village which had once taken it, even if profitable cultivation was quite possible without it, and the water was sorely needed in more arid tracts. At the same time landowners were tempted to take water in seasons when it was not really required. The system was specially unsuited to any country in which irrigation was being rapidly developed, and great inequality of treatment would ensue if in such a condition of things a permanent settlement was introduced.

60. Separation of land revenue and water revenue.—The ground-work of Mr. Prinsep's assessment scheme was the separation of the assessment of land as such from the assessment of the additional advantages accruing to the landowners from the supply of irrigation by his

*Despatch No. 14 (Revenue), dated 9th July 1862. For the discussion regarding permanent settlements, see Chapter XXVIII.

†See Auckland Colvin's Memorandum on the revision of Land Revenue Settlements in the North-Western Provinces, paragraphs 74—88.

own exertions or at the cost of the State. In the produce estimates framed under his instructions the crops entered were the actual crops grown, but the outturn represented "the average yield in ordinary unirrigated land for a year of average rain" as "ascertained from *chaudhris*, *patwaris*, and others for each *chakla* (assessment circle) separately." This involved the absurdity of assuming unirrigated yields for certain crops which in some of the tracts under assessment were never grown on unirrigated land. The produce was valued at the average prices current in the past thirty years. Now that the half-assets rule had been adopted, Mr. Prinsep held that one-sixth of the gross produce fairly represented the amount due to the State, and instructed his subordinates to use this fraction in their estimates. But it may be doubted whether as Settlement Commissioner he attached more importance to the produce estimate than he had done as Settlement Officer of Sialkot when he described it as "after all but an auxiliary *jama*" which "answers the purpose for which it is required pretty fairly." Plough estimates were framed and the opinions of native officials and respectable landowners recorded. But Mr. Prinsep's chief reliance was on a very careful study of the past fiscal history and present resources, natural and acquired, of each estate and circle.

61. Well *abiana* and canal water-advantage rate.—The land being assessed in its unirrigated aspect, he proposed to impose on each well a small fixed sum, and on canal lands a light fluctuating land revenue rate in addition to the water-rate and levied like it on the acreage actually watered. The additional charge on account of irrigation was known as *abiana* or water-advantage rate or revenue*. As regards the irrigated part of his assessment, Mr. Prinsep cannot be said to have formally abandoned the half-net assets rule, but he practically did so. He arrived at the conclusion that one rupee an acre was as much as the State could justly claim as well *abiana* in the districts under settlement, and he seems to have thought that this rate might properly be adopted throughout the province. Starting from this assumption, the actual *abiana* in each circle was determined by the average area served by an average well. In deciding what this was Mr. Prinsep fixed his attention on the amount of the rainfall and the nearness or distance of water from the surface, dividing the country into rain zones and zones of approximately equal water level. These two factors have of course a very marked effect on the acreage watered by wells, but Mr. Prinsep regarded them too exclusively. He had no proper crop returns by which to check his conclusions, and his estimates of the irrigating capacity of wells were exceedingly moderate. The *abiana* throughout a circle was fixed at so many rupees per well. The amount did not change from village to village, and it seems to have been part of the original scheme that every well in an estate should pay an equal amount, though this was not consistently carried out in the distribution of the revenue over holdings.

62. Water-advantage rate not uniform.—The water-advantage rate on the Bari Doab Canal was not uniform. It was Re.1-4-0 per acre near its head in the Pathankot *tahsil* of Gurdaspur, falling gradually lower down

*The canal *abiana* was also known as "*khush hatsiyati*," Mr. Prinsep's *abiana* scheme as regards wells was anticipated to some extent by Mr. Davies in Amritsar. (See his Settlement Report, paragraphs 16, 22 and 31).

till it reached twelve annas in Lahore. The plan of a fluctuating canal water-advantage rate had the great merit of securing to the State a fair share of the profits arising from the rapid expansion of canal irrigation during the currency of his settlements.

63. Proposals regarding well abiana.—At first Mr. Prinsep thought that the dry assessment and the well *abiana* would both be fixed in perpetuity in a large number of estates. He admitted that his plan involved the surrender of a considerable amount of revenue in some of the districts then under settlement, but he argued that Government would only be giving up what it ought never to have taken, and that the loss would be confined to a few districts near the hills in which the difference between *chahi* and *barani* rates exceeded one rupee. If the settlement was made permanent and new wells were not assessed, some inequality would arise, but in view of the lightness of the water-advantage revenue this was not a matter of great importance and in any case it could be obviated by re-distributing the *abiana* every five years over all wells at work. Many new wells would be sunk, and in this way the *abiana* would become lighter and lighter. But, if Government was not ready to accept for ever the reduction of revenue involved in his proposals, it could gradually be recovered by assessing new wells with the circle *abiana* rate after a short period of exemption, the *abiana* on wells falling out of use being remitted. When at last it was decided that a permanent settlement should not be made Mr. Prinsep suggested that the well *abiana* might remain unchanged for fifty years.

64. Well abiana system condemned.—His proposals were reported to Government, but for years no orders were passed, and, when the system was finally condemned, it was too late to prevent its application to the districts settled under Mr. Prinsep's supervision. But a resolution issued in 1872 (Department of Agriculture, Revenue, and Commerce, No. 818, dated 14th June 1872) forbade its adoption in future settlements.

65. Objections to the system.—The objections brought against the scheme were as follows. It violates the principle that the State is entitled to half the net assets. It involves much inequality, for under it villages with good wells will be more lightly assessed than villages with poor wells. It will cause a loss of revenue which in some districts, such as Jallandar, will be very serious. This loss is unnecessary, for it is far from certain that the proposed methods of assessment will stimulate the sinking of new wells more than the existing system. The scheme conflicts with the orders for the grant of protective leases for new wells issued by the Board of Administration in 1850, by which the expenditure of capital in well-sinking was already sufficiently protected. The plan also weakens "the principle of village unity and responsibility" by taking out of the hands of the landowners the power of distributing the whole revenue over different classes of land in whatever proportions they think fit. It might also have been urged that to assume that one rupee an acre was a proper water-advantage rate throughout the province was a rash generalization from the facts observed in a few contiguous districts in one corner of the Punjab, and that the inevitable tendency of the plan would be to force up the assessment of

unirrigated land to compensate for the reduction of well assessments.* But the fatal objection to the scheme was that it assumed a much greater equality of condition in wells than really exists. A good deal may be said for the imposition of that part of the assessment of the land attached to a well which represents the difference between the product of irrigated and unirrigated rates in the shape of a lump sum *abiana*.† But it will rarely be found that the same sum is suitable for every well in a large village and it is absurd to imagine that it could be suitable to every well in an assessment circle. The result, as was seen at the time, was sure to be the reduction of the assessment to a level suitable for villages with the weakest wells

66. Controversy regarding Mr. Prinsep's assessments.—At the same time the warnings Mr. Prinsep uttered as to the tendency to lay undue burdens on well lands were salutary, and the attention he paid to the ascertainment of the irrigating capacity of wells was a good lesson to later Settlement Officers. In the recent re-settlement of the districts in his charge his view that great moderation was requisite in assessing their wells has been in a large measure vindicated. The initial demand in the three districts for whose settlement Mr. Prinsep was immediately responsible was somewhat below the demand of the first regular settlement. The assessments were condemned as unduly lenient and only sanctioned for ten years, but the term was soon after extended to twenty years. It must be remembered that the part of his scheme which involved the assessment of new wells was never put in force, and that, as he had anticipated, the receipts from canal water-advantage revenue rose rapidly.

67. Improvements in compilation of statistics.—The improvements which he effected in the compilation of statistical information were of permanent value. A good form of village note-book took the place of the Nos. II, III and IV statements. The tables contained in these note-books were abstracted in a statement for each assessment circle with the remarks of the Settlement Officer justifying his proposed assessment noted upon it. Till the Settlement Commissioner had passed orders on the circle statement the work of assessing the revenue village by village was not to be undertaken. The assessment statements prescribed in the rules under the first Land Revenue Act, XXXIII of 1871, were to a great extent modelled on returns devised by Mr. Prinsep.

III.—Third Period of Punjab Settlements, 1871—1879.

68. Third period of Punjab settlements, 1871—1879.—The third period of Punjab settlements lasted from 1871 to 1879. During almost the whole of it Sir James Lyall held the office of Settlement Commissioner, and when he left it he became Financial Commissioner. He took up the former appointment in November 1871, and in the same month the first Land Revenue Act, XXXIII of 1871, was passed. Sir Robert Egerton influenced the settlement policy of this period, first as Financial Commissioner, and later as Lieutenant-Governor. He and Sir James Fitz James Stephen,

*See e.g., paragraphs 3 and 4 of Mr. Prinsep's No. 124, dated 16th September 1870, printed on page 1043 of Financial Commissioner's Selections (New Series No. 12).

†When the districts settled under Mr. Prinsep's supervision were re-assessed the landowners in many cases retained the *abiana* system as a convenient way of distributing the *chahi* assessment over wells with reference to their relative capacity.

then Legal Member of Council, were the joint authors of the Land Revenue Act of 1871. The rules under the Act were framed by Mr. D. G. Barkley under Sir Robert Egerton's supervision and were followed by the former officer's revised edition of Thomason's Directions, which was the text-book of revenue officers in the Punjab till the passing of the second Land Revenue Act in 1887.

69. Settlements effected during this period.—The settlements which belong to this period fall into four groups :—

- (1) the first regular settlement of the six frontier districts and of Muzaffargarh ;
- (2) the revised settlements of three south-western districts, Multan, Jhang, Montgomery and of part of Ferozepore ;
- (3) the revised settlement of Jhelum ;
- (4) the revised settlement of the greater part of the old Delhi territory, Rohtak, Gurgaon, Delhi, and a tahsil and a half of Karnal.

Some of these settlements had been begun before the opening of this period, and some were not finished at its close. The work in the districts included in the first two groups, except in the case of Peshawar and Hazara, whose settlements belong largely to the previous period, was under the control of Mr. Lyall ; in the districts of the third and fourth groups the local Commissioners were the supervising officers.

70. Attempt to make one-sixth gross produce the standard.—The Financial Commissioner, Mr. Egerton, held that the absence of competitive cash rents made the half net assets standard unsuitable to the Punjab, and set it aside with the sanction of the Lieutenant-Governor, declaring that the basis of assessment should in future be a share of the gross produce to be fixed by the Local Government.* This proportion, as in Mr. Prinsep's settlements, was put at one-sixth approximately, unless for special reasons a different rate was adopted, but the value of grain and money rents as applied to the crop and area statements was also to be noted. Statistics of prices for twenty years were to be tabulated† and experiments were to be made in all districts to ascertain the average yield of the principal crops.‡ In the instructions to the Settlement Officers of Gurgaon, Delhi and Karnal, which he framed under section 9 of the Land Revenue Act for the sanction of Government, the one-sixth produce standard was laid down, but the Government of India, disapproving of any departure from the rule of half net assets, refused to sanction the instructions, and in those which were finally issued in 1872 the standard was distinctly declared to be "one-half of the share of the produce of an estate ordinarily receivable by the landlord either in money or in kind." The importance of the produce estimate in a country where the landowners as a rule divided the crops with their tenants, was emphasized, while at the same time the weight to be given to general considerations was admitted.§ These were the instructions in accordance with which assessments were made till the second

*Book Circular XXI of 1871, compare the preamble to Act XXXIII of 1871.

†Book Circular XXI of 1871, paragraph 2.

‡Book Circular XX of 1871.

§See Appendix I.

Land Revenue Act was passed in 1887. All reference to the one-sixth standard was omitted in the final text of the rules under the Land Revenue Act, but in the form of produce estimate appended to them it continued to be shown as the measure of the State's claim. Mr. Purser had shown that in the part of Montgomery which he settled one-sixth of the produce would absorb two-thirds, and in part of Ferozepore more than the whole, of the landlord's receipts. Accordingly in the settlements under Mr. Lyall's control the estimate of one-sixth of the gross produce was usually supplemented by a calculation based on half the actual rental. But in most of the districts of the old Delhi territory, where grain rents were rare, one-sixth of the gross produce continued to be used exclusively as the standard.

71. The produce estimate.—There seems to have been a tendency to discriminate more between soils than hitherto, but the classification was usually made on broad and simple lines. Considerable attention was paid to the elaboration of produce estimates. Mr. Prinsep's *abiana* system having disappeared, irrigated as well as unirrigated rates were shown, but an attempt was not always made to discriminate between different soils in the produce estimate, even when they were separately recorded for assessment purposes. The yield was determined with reference to experimental cuttings and to information obtained by verbal enquiry. The experiments were many, but the area observed in each case was very small, and the results were generally regarded as of little worth. The produce was, as a rule, valued at the average of the prices prevailing during the past twenty years. As the general trend of prices since 1861 had been upwards, the valuation was generally a moderate one, with reference to existing circumstances. The difficulty of determining what was an average crop was felt to be extreme, and naturally the rates of yield adopted were pretty low. The area sown was known to vary largely in many tracts from year to year, but the basis of the figures given in the produce estimates was the crop entries for each field made at the time of survey in the measurement *khasra* and not, as at present, the average area deduced from a continuous record founded on fairly accurate harvest inspections. Major Wace, who succeeded Mr. Lyall as Settlement Commissioner in 1879, maintained that having regard to the system of cultivation generally followed, at least in the case of unirrigated lands, the record made at survey was bound to produce grossly inaccurate results, and Mr. Lyall, while scarcely prepared to admit this, looked on produce estimates as only a rough guide, and, like the other revenue authorities of the day in the Punjab, allowed wide divergence from them in actual assessment. Not only the area sown, but the yield also was known to fluctuate greatly. Mr. Lyall expressed his own opinion of produce estimates in the pithy remark, that they "are not, of course, accurate instruments, but they are like an old gun which sends a ball somewhere near the mark, sometimes low, sometimes high."* In practice the estimates were generally considered to shoot too high for assessment purposes. Mr. Lyall held that it was impossible to assess peasant proprietors up to the half-assets standard where the population

*Settlement Commissioner's No. 66-C., dated 15th September 1877, paragraph 11. Of Mr. Purser's striking account of the difficulties besetting the framing of a produce estimate, in Montgomery on page 182 of his Settlement Report.

was at all dense and rent rates were high owing to the competition for land,* especially if the outturn also fluctuated greatly.†

72. Fluctuating assessments.—This period was distinguished by the wide extension of the plan of fluctuating assessments, the first example of which in the Punjab was Mr. Prinsep's water-advantage rate for the lands irrigated by the Bari Doab Canal. Act XXX of 1871, which applied only to the Punjab, and the Northern India Canal and Drainage Act, VIII of 1873, which superseded it, recognized this method of assessing canal lands in the provisions relating to the imposition of an owner's rate over and above the rate paid by the occupier as the price of the water supplied. This new system of rating was adopted in the districts watered by the Western Jamna and Agra Canals; and in substance also in the tracts in Montgomery dependent on inundation canals from the Sutlej. At the same time Mr. Lyall, with the full support of Sir Robert Egerton, introduced fluctuating assessments in the *sailab* tracts of Bannu, Dera Ismail Khan, Multan and Muzaaffargarh. These and other instances of the fluctuating method of assessment belonging to this period are noticed more fully in chapter XXVII.

73. Increased control over settlements.—The lax control over settlements which had hitherto prevailed gave place to much closer supervision. A settlement could now only be undertaken with the sanction of the Government of India (Act XXXIII of 1871, section 11) and the officer put in charge of it was furnished with instructions, stating the principle on which the revenue was to be assessed, approved by the same authority. (section 9). A report on the rates to be adopted in each *tahsil* was submitted for the orders of the Financial Commissioner and of the Lieutenant-Governor, but it was not the usual practice for the latter to examine the rates closely or offer, at this stage of the proceedings, any detailed remarks on the assessments, unless some important change, such as the introduction of an owner's rate, was in contemplation. A settlement was considered to be in progress till sanctioned by the Local Government (section 17). This sanction was not formally given till the final report for the whole district had been reviewed by the Local Government, and even by the Government of India. It was then too late to alter assessments which had generally been in force for years, an example of the fact that checks which are too elaborate are worthless. After receiving orders on his *tahsil* assessment report, and announcing his village *jamas*, the Settlement Officer forwarded a detailed list of the latter for the Financial Commissioner's approval (section 31 and rules under Act XXXIII of 1871, chapter C. V. 5).

74. The local rate.—The local rate was first imposed during this period. Its history and that of other cesses will be given in the next chapter.

IV.—Fourth Period of Punjab Settlements, 1879—1889.

75. Fourth period, 1879—1889.—The fourth period of Punjab settlements embraces the ten years from 1879 to 1889, during which Major Wace held successively the offices of Settlement Commissioner and Financial

*Financial Commissioner's Review of Muzaaffargarh Assessment Report, paragraph 3.

†Financial Commissioner's Review of Shorkot and Jhang Assessment Report, paragraph 9.

Commissioner. For the first four years Mr. Lyall was Financial Commissioner, and for the last two he was Lieutenant-Governor. The Settlement Commissionership was abolished in 1884, when a Second Financial Commissioner was appointed, and the control which the Commissioners of divisions had exercised over settlements in the early days of the Punjab Administration was restored to them. The first regular settlement of Simla and the revised settlements of Ludhiana, Hoshiarpur, Jullundur, Rawalpindi, Ambala, and parts of Karnal and Ferozepore were made in this period, and before its close the re-assessment of Hissar, Gurdaspur, Kangra, Shahpur, Gujrat, Gujranwala, Sialkot, Lahore and Amritsar had been undertaken. The ten years beginning with 1879 were marked by great changes in settlement procedure culminating in the system embodied in the Land Revenue Act of 1887 and the rules under it, and in the instructions under section 49 of the Act* and the assessment circular issued in 1888.

76. Policy underlying the changes introduced in this period.—The keynote of the new policy was the assimilation of settlement work and ordinary district revenue work. Its success depended on the possibility of so improving the latter as to avoid the necessity of extensive surveys and revisions of records at future settlements, and of basing the assessments largely on a continuous record of agricultural statistics compiled by a well-trained staff of *patwaris*.

77. Patwaris and village revenue records before 1885.—The importance of having an efficient body of *patwaris* in every district and of embodying in the village records all changes of ownership and occupation was early recognised in the Punjab,† but the orders issued on the subject bore little fruit. Generally speaking, it may be said that the *patwaris* spent the time between two settlements in forgetting what they had learned in the first. Year by year the records were allowed to get more and more out of date, so that when the time for a new settlement arrived, much money and labour had to be spent in entirely re-casting them. In the third period of Punjab settlements some practical steps were taken to secure a higher degree of efficiency.‡ If the rules in force, which were brought together in a vernacular *patwaris'* manual in 1876, could have been carried out in practice, there would have been available, for every estate a *jamabandi* showing the existing state of ownership, occupancy, and rents, and a useful set of statistical returns. The scheme was sound, for it recognized the cardinal fact that the maintenance of the record and of the annual statements of cultivation and wells (*milan khasra*), crops (*jinswar*) and transfers (*naksha intikal*) depended on a periodical field-to-field inspection. But it was marred by defects in detail and by over elaboration. The mutation procedure especially was slow and cumbrous, and was in practice neglected, while really accurate crop returns were not to be looked for when the *girdawari* of both harvests took place at one time in the beginning of the cold weather. But a much more perfect system would have

*See Appendix I.

†See Board of Administration Circular No. 2 of 1851, Financial Commissioner's Circular No. 55 of 1856, and Cust's Revenue Manual, pages 56-57. The last lays stress on the systematic testing and correction of the field map every year.

‡See Financial Commissioner's Circular No. 111 of 1876, and the *Dastur-ul-Ami Patwarian* issued in the same year.

failed owing to the weakness and inefficiency of the supervising staff. As there was no proper oversight of the *patwari's* work, he often found it quite safe to register the crops without seeing them, and to make the new *jama-bandi* a copy of that of the previous year. It is, therefore, small wonder that the statistical returns were worthless for assessment purposes. No one who knows what land records were like before 1885 will dream of undervaluing the reforms introduced in this period.

78. Shaping of the new policy in the United Provinces.—The new policy first took shape in the United Provinces, where it was clearly outlined about the year 1874 in a note written by Sir Edward Buck, when officiating as Secretary to the Board of Revenue.* He pointed out that the object to be aimed at was to secure—

- (a) a correct record of occupancy, crops, and, as far as possible, rents, based on yearly field-to-field inspection; and
- (b) a correct record of agricultural statistics excerpted from (a).

The means to this end were—

- (a) the provision of a properly educated staff of *patwaris*;
- (b) the strengthening of the supervising staff of *kanunogs*; and
- (c) the appointment of a special officer for the Province charged with the oversight of record work and the collection of the agricultural statistics on a uniform system.

So far as settlements were concerned the fruit of these measures would be a great saving of time and money—getting rid of the necessity of framing new records, and laying a much more solid foundation for assessment. In 1877 these ideas were embodied in the United Provinces in a new set of *patwari* rules and a further development was given to them by making provision “for the systematic maintenance of village maps up to date, so that they shall each year represent existing facts.....with the view of obviating, as far as possible, the heavy expense of further field surveys.” About the same time the *kanungo* staff was largely increased and a Director of Agriculture was appointed. The adoption of similar measures in other provinces was one of the recommendations of the Famine Commission, and in 1880 and succeeding years was urged on Local Governments by the Government of India.

79. Introduction of the new system into the Punjab.—In the Punjab the new system found in Major Wace a hearty supporter. As soon as he became Settlement Commissioner he had taken measures to secure the accurate registration of the crops of both harvests at the time when they ripened, and ordered the average results for several years to be entered as the crop areas in the produce estimate. At the same time he provided for a very careful and detailed enquiry into prices and the carrying out of numerous experiments by the settlement staff to determine the yield of the principal crops. The experiments hitherto made having been discredited on account of the smallness of the plots observed (paragraph 71), much larger areas were now selected, and elaborate reports of the experiments carried out were submitted to the Settlement Commissioner harvest

*The whole paper is well worth perusal. It will be found on pages 23—29 of “Permanent and Temporary Settlements, North-Western Provinces.”

by harvest. Colonel Wace's instructions did not differ greatly from those at present in force.* His next step was to simplify maps and records by discouraging excessive minuteness in survey work and to apply a remedy to the vicious procedure by which the survey and record work of the *patwari* in the field was followed by an elaborate scrutiny or "attestation" in the office, after which the record-of-rights was fairied.† The inevitable tendency of the old system was to encourage careless work in the field both on the part of *patwaris* and of supervising officers. A further advance was made in the instructions issued in 1883 in connection with the Karnal-Ambala and north Ambala settlements. The remarks prefixed by Major Wace to these instructions explain the general character of the changes introduced, but they do not refer to the new departure in survey work then prescribed, the value of which has since been fully established.‡

1. "Since I issued my Circular No. 3, dated 8th January 1880, a material simplification of settlement work has been attained in the settlements recently commenced. We have also succeeded in working almost entirely through the *patwari* agency. But the most important change which has taken place is expressed in the Government of India's resolution No. 2, dated 4th October 1881.§ Government both expects executive revenue officers to maintain existing records correct to date and also expects Settlement Officers to dispense with fresh surveys, renewed classifications of soils, and detailed revisions of records as far as possible. *

* * * * *

2. "The main position which it is proposed to take up in order to forward the Government of India's policy is that settlement operations shall not, so far as they are concerned with the record-of-rights, be of a nature different to the *patwaris'* ordinary work, but that they shall merely continue that work under closer supervision and with improved accuracy. The previous scheme of settlement operations which involves the suspension of the *patwaris'* ordinary work, and the elaborate preparation of a new record in four distinct stages (boundary survey, field survey, attestation, and fairing) must be regarded as a thing of the past. And the efforts of the Settlement Officer and his establishment must be given to securing correct annual papers of the same nature as those filed when settlement operations are not in progress; re-measurements being resorted to only so far as necessary, and being made in such cases so simply and accurately that attestation and fairing shall be unnecessary * * * *

4. "Usually, before re-measuring any village, at least one set of annual papers should have been prepared under the supervision of the settlement establishment; that is to say, there will have been a *kharif girdawari* followed separately by a *rabi girdawari*; all mutations and partitions not previously incorporated in the annual papers will thereby be brought up to date; and the efficiency of the field map and its shortcomings will be tested. In short, the Settlement Officer will, by this operation, amend and

*See Appendix II.

†Settlement Commissioner's Circular No. 3, dated 8th January, 1880. Attestation in the village had been carried out in some districts when Mr. Lyall was Settlement Commissioner.

‡The "square system" of measurement, see Chapter XII.

§Selections from the records of the Financial Commissioner's Office, New Series, No. 1.

correct the village *jamabandi* so far as it is possible to do so without re-measurement. He will then be in a position to say whether re-measurement is desirable or not. If re-measurement is necessary, the corrected *jamabandi* and the *girdawaris* by which it was preceded will have given a complete and accurate list of the holdings ; and the measurements will not be continually checked by the necessity for making numerous entries in the list of mutations. * * * *

6. " The Settlement Officer's record work then will be—

- ✓ (i) to secure accurate *girdawaris* of each harvest separately throughout the term of settlement operations ;
- (ii) to see that throughout this term complete annual papers are prepared and filed on the same system as will be carried out after settlement operations are finished, and to perfect that system, and to drill the *patwaris* thoroughly into it ;
- (iii) gradually to provide new field surveys of the villages in which re-survey is required."

7. " The revised settlement record will be—

- (i) in villages that are re-surveyed, the measurement papers as described in the enclosed instructions, plus the *jamabandi* of the year of measurement ;
- (ii) in villages that are not re-surveyed, the *jamabandi* of some year shortly preceding the introduction of the new assessment.

" In both cases the introduction of the revised assessment will be a subsequent and entirely separate operation, not to be attempted until the record has been revised so far as may be necessary. The revised administration paper will be added to the revised record by the Superintendents, as they find leisure."

8. " Your reports on the new assessment rates of each *tahsil* can be submitted, as soon as you consider that you have sufficiently reliable *data* for each *tahsil*. These *data* will be made up—

- (i) partly of the *data* of villages re-surveyed ; and
- (ii) partly of *data* taken from the annual papers of villages not yet re-surveyed, or which it is not intended to re-survey."

80. The new system made general.—In 1885 the *kanungo* staff was organized and greatly strengthened and a Director of Land Records was appointed. At the same time new *patwari* and *kanungo* rules, largely founded on the settlement instructions referred to above, were issued. Their object was explained to be the securing of—

- (a) real efficiency among the *patwaris* and *kanungos* ;
- (b) improved field-to field inspection, and record of the results of each harvest ;
- (c) the continuous record in convenient tables of the total results of each harvest and each year's husbandry, these tables being kept first by villages, secondly, by assessment circles, and thirdly, by *tahsils* ;

- (d) the punctual record and attestation of all mutations of rights and their prompt incorporation into the *jamabandi* ;
- (e) the cessation of the present practice, under which in numerous cases mutation orders are passed in the absence of the parties, or after calling them away from their villages to the *tahsil* office ;
- (f) the release of the *tahsildars* and *naib-tahsildars* from a large amount of revenue case work, which, under the procedure hitherto prescribed for such work, ties them to their *tahsil* offices, and overburdens their small office establishment with clerical duties ;
- (g) and, as a consequence, the systematic visiting of each village either by the *tahsildar* or *naib-tahsildar*.

The statistical tables referred to under (c) were embodied in village assessment circle, and *tahsil* revenue registers. The volume containing the village registers took the place of the old village note-book.

81. The Land Revenue Act of 1887 and the first settlements made under it.—In the Land Revenue Act of 1887 the policy of assimilating settlement and ordinary revenue work was carried to its logical conclusions. The term settlement disappeared altogether. The Settlement Officer was henceforth a revenue officer invested with most of the powers of a Collector and charged with the duty of making a general re-assessment.* The records drawn up at settlement and the annual records prepared by *patwaris* were put on precisely the same legal footing, and a special revision of the record-of-rights, though provided for, was regarded as an exceptional proceeding, having no necessary connection with the re-assessment of the land revenue. The officers put in charge of the settlements started about the time of the passing of the Act were enjoined only to undertake the re-measurement of an estate where the necessity for it was clearly proved. Where the old maps on being tested proved accurate enough for revenue work, they were to be retained, and brought up to date. No special revision of records was ordered. The principle was laid down that the district revenue staff as recently strengthened by the re-organization of the *kanungo* agency should be fully utilized, and the extra establishments allowed were small. The old plan of making the Deputy Commissioner himself re-assess his district was revived in some cases, and it was intended that the *tahsildar* should take a large share in the settlement work of his *tahsil*.†

82. The assessment instructions under section 49 of the Act and the Assessment Circular issued in 1888.—About the same time assessment instructions under section 49 of the Act of 1887 superseded those which had been in force since 1873 (see Appendix I) and a circular was

*The term "Settlement Officer" is used throughout Act XXXIII of 1871 (see, e.g., section 11). Since the passing of Act XVII of 1887 it has become usual to describe the revenue officer charged with the duty of making a general re-assessment (sections 49—50) as a Settlement Collector. But the term is a misnomer, for the powers under the Land Revenue Act from which the Collector of a district derives his title are precisely those powers which are not conferred on an officer making a settlement.

†See papers connected with a conference on re-assessment operations in the Punjab in Revenue Proceedings No. 9 of September 1887.

issued bringing assessment procedure into conformity with the new policy.* A broad and simple classification of soils and grouping of villages into assessment circles was advocated. For his assessment *data* the Settlement Officer was henceforth to rely on the new revenue registers (paragraph 80), and especially on the continuous record of crops.

The elaborate returns hitherto compiled for assessment purposes were given up. "The proposed rates," it was said, "should be justified by broad and simple arguments such as will command equally the confidence of superior revenue authorities and the assent of the land-owners. In short, provided that a sufficient account is given of the reasons by which the proposed rates are supported, every practicable abbreviation and simplification of these reports is much to be desired. The points on which the new assessment turns should be approached with all practicable directness, avoiding detailed notice of collateral issues, except so far as they are of major importance. As a general rule Government has no desire to materially alter pre-existing rates. They may be raised where there is a marked rise in prices, where they are unduly low as compared with well established rents or the rates of adjacent districts, or where the provision of new means of irrigation has completely altered the circumstances of the tract. They may be lowered where there is reason to think them above the half assets standard, or where, when applied to circles in which the area of cultivation has greatly increased, they give percentages of enhancement which cannot be safely taken."

The circular as drafted by Colonel Wace relinquished the produce estimate altogether as an assessment guide. But Sir James Lyall was not prepared to go this length and required Settlement Officers to frame an estimate of the "net value of rent to proprietors paid by *batai*-paying tenants-at-will in an average year for an average holding for as many classes of land as are necessary to be taken for separate revenue rates in each circle."

He also required them to submit two reports, a preliminary one deducing the half net assets standard rates from the rent *data*, and a further one dealing with the actual assessment which it was proposed to impose, and the revenue rates to be used as a general guide in its distribution over estates. He observed :—

"The preliminary report will be based entirely on actual facts, no allowances being made with regard to results, and will be termed the preliminary report on assessment circles, prices, yields, rent rates, and half net assets. The Financial Commissioner on receiving the report will consider if the proper number of assessment circles and of classes of soil have been used, and whether the prices and rates of yield and *zabti* rates adopted are fair, the facts as to customary rent rates and competition cash rents may be accepted as correct, and the theoretical half net assets soil rates accepted as fair estimates. When the Financial Commissioner has approved this report, the Settlement Officer will begin the actual work of detailed assessment. He will apply his theoretical standard rates to a number of

*Financial Commissioner's Circular No. 39 of 1888. In reading this circular it must be remembered that it is the work of two hands, the draft by Colonel Wace having been a good deal altered by Sir James Lyall.

average villages in each assessment circle, which there is no special reason for assessing below the standard, and devise revenue rates suitable for assessing such average villages in each circle. If these rates are for general reasons considerably below the theoretical rates, he should be prepared to give such general reasons for going below in his assessment report. Having thus got his revenue rates to be used as assessment implements for each circle, he should inspect and assess each village, going above or below his rates according as the village is above or below average, but making allowance for special circumstances of all kinds such as comparative habits and circumstances of the proprietors, proximity of markets, communications, incidence of past assessments, profits from grazing, sale of wood, young stock, *ghi*, fruit, &c. He will then report his proposed gross assessment for each circle based on his revenue rates and rough detailed village assessments for approval. This will be his assessment report. It is not necessary, of course, that his revenue rates should bring out his proposed assessment. As a fact they should ordinarily bring out something higher if they are fairly and properly framed."

83. Death of Colonel Wace in 1889.—The remodelling of revenue and settlement procedure in the Punjab on the lines which Colonel Wace had strenuously advocated was now complete. He was not permitted to watch over the development of the new system, for he died in April 1889.

V.—Fifth Period of Punjab Settlements, 1889 to present day.

84. Fifth period 1889 to present day.—Of the fifth period extending from 1889 to the present time little need here be said, for the greater part of this book is an attempt to explain settlement procedure and policy as it now exists. It may be described as a time in which the old assessment policy and the new procedure were put to the test. The procedure was shown to be essentially sound, though it would have been wiser to make the passage from the old to the new system more gradually. But the ideas which underlie the changes in revenue and settlement procedure should suffer no disparagement from the fact that they were carried to their logical results too suddenly. As regards assessment it may be said with truth that Settlement Officers of the present day have in the revenue registers aids such as none of their predecessors enjoyed, and that year by year these aids will become more valuable.

85. Expectation that operations could at once be much simplified not fulfilled.—The expectation that re-survey could in most cases be avoided and that the correction of the old field maps would be a comparatively simple process proved to be fallacious, and the small establishment originally provided for the new settlements were found to be insufficient. But if these settlements lasted longer and cost more money, they at the same time yielded larger enhancements than had been originally contemplated, and a better foundation was laid for future revenue work on the new lines than would have resulted from more summary operations. Some of the changes introduced by the assessment circular of 1888 had to be re-considered. The substitution of a produce estimate for an average holding for an estimate of the total produce of an assessment circle and the plan of dealing with half assets standard rates and revenue rates in separate

reports were soon abandoned. Early in this period Sir James Lyall introduced an important change in the assessment of *nahri* lands by which a fixed canal-advantage rate took the place of the old fluctuating water-advantage rate (see Chapter XXVI). A fresh set of assessment instructions was sanctioned by the Government of India in 1893 (Appendix I*). The new arrangements for the control of settlement adopted in the previous period did not work well, and the appointment of a special Settlement Commissioner was revived in 1897.

86-A. Recent developments of the system of revising the record of rights.—In the districts that came under settlement from 1902 onwards, commencing with Rawalpindi and Gurgaon, correction of the old field maps took the place almost completely of re-measurement. The adoption of the former course pre-supposes a degree of accuracy in the old map which it was believed had only been obtained in the maps prepared on the square system during the Fourth Period of Punjab Settlements. It was found, however, that the field maps made in the settlements at the end of the Third Period and the beginning of the Fourth, though not on the square system, were so very reliable that it was possible to bring them up-to-date by a careful revision. Since the districts which were mapped on the square system have begun to come under settlement, the process of map correction has become general, and has at the same time been simplified. Its great advantage is that it does not, like remeasurement, necessitate any great temporary augmentation of the regular *patwari* staff of the district. A strong supervising staff is, however, necessary in order to keep pace with the *patwaris* who turn out work much faster than at re-measurement, but, as on the other hand the work as a whole is completed more expeditiously, the more modern settlements are both shorter and cheaper than those of the earlier part of the Fifth Period.

86-B. Recent developments of settlement policy.—The period to which the preceding paragraph relates was also marked by certain developments of settlement policy. The subject of the assessment of well lands was again taken up and more lenient rules were prescribed (*cf.* paragraph 441). The unsuitability of fixed assessments for cultivation on inundation canals and in the wide river valleys of the south-west Punjab was recognised, and various systems of fluctuating assessment were introduced in that part of the Province. The fluctuating system was also applied to the large tracts recently brought under irrigation by the construction of the Lower Chenab and Lower Jhelum Canals. On the other hand, it was decided in connection with the re-assessment of the districts watered by the Western Jumna, Sirhind, and Upper Bari Doab Canals that when irrigation from a perennial canal has become well established the most suitable method of assessing the extra profits which the landowner derives from irrigation is a light fixed demand and not an acreage rate on the area irrigated from year to year. A marked feature of recent settlements is the use of cash rents as the basis of the Settlement Officer's estimate of half assets. They are now paid on much larger areas than was formerly customary and our record of them has improved. In 1910 it was decided to revert to the system

*Revised in 1914 and superseded by rules framed in 1929 under the Land Revenue Amendment Act (III of 1928).

in force from 1886 to 1897 of having two Financial Commissioners instead of one Financial Commissioner and a Settlement Commissioner.

86-C. Post-Reform Settlement policy.—With the introduction of the reformed scheme of Government in 1919 began an agitation for the general re-casting of the policy and standard of land revenue assessment. The ball had been set rolling by the recommendations of the Joint Parliamentary Committee of 1919 which considered that these matters should be the subject of legislative enactment. A bill to give effect to the proposal was introduced in the Provincial Legislative Council in 1922. After various vicissitudes it eventually became law, in a form very different in many important matters from that in which it had been originally introduced in 1928, in the Punjab Land Revenue Amendment Act III of that year.

The Act codifies the main principles governing the standard of assessment, the amount of enhancement permissible, and the period of settlement, and provides machinery to make rules for determining the money-value of net-assets, allowances of exemption from assessment for improvements, the extent of enhancement permissible, and other minor matters. The new Act lowers the maximum standard of assessment from one-half of the net-assets to one-fourth. It limits the increase permissible in any assessment circle to 25 per cent. over the former assessment, except where canal irrigation has been introduced since the last assessment was imposed, and fixes the period of assessment, except in undeveloped tracts, at 40 years. The rules which cover all the principal processes involved in revising assessments are brought under the control of the Council and the revenue payers are consulted during their progress to a much greater extent than previously. But with the exception of the changes of principle indicated above the new Act and the rules thereunder in the main merely codify the existing instructions and procedure.

CHAPTER VII.—Cesses.

87. Classification of cesses.—Cesses may be ranged under three heads—

- (a) Cesses imposed on landowners by authority of Government.
- (b) The *malba* cess imposed by landowners on themselves in order to meet common village expenses.
- (c) Cesses paid to the landowners by other residents in a village.

The first two classes are described in the Land Revenue and Tenancy Acts as “rates and cesses,” and are broadly distinguished from the third class by being “primarily payable by landowners,”* though they often form part of the rent taken from occupancy tenants.

88. Cesses imposed by law.—The cesses imposed by law are—

- (a) Cancelled.
- (b) The village officer's cess (section 29 of the Land Revenue Act).
- (c) An annual rate imposed on owners to meet the cost of drainage operations by which their land is improved (section 59 of Act VIII of 1873).
- (d) The local rate payable under section 5, and any fee leviable under section 33, of Act XX of 1883.

No cess, not distinctly authorised by law, can be levied, even with the concurrence of the people from whom it is proposed to realize it, without the previous consent of the Government of India.†

89. Zaildari and village officer's cesses. Annual drainage rate.—It is not now usual in the Punjab to make the landowners pay for the *zaildari* agency by imposing a cess. The cost is met by setting aside for the purpose a portion of the land revenue, which as a rule, is fixed at one per cent. The village officer's cess included the *patwari* cess, the *lambardar's pachotra*, and the surcharge of one per cent. on the revenue levied in the few cases in which the appointment of chief headman or *ala-lambardar* has not yet been abolished. With a very few exceptions the headman's *pachotra*, as the name implies, amounts to 5 per cent. on the revenue. In early settlements a normal rate for the *patwari* cess was considered to be six *pies* per rupee of land revenue, which is equivalent to a surcharge of $8\frac{1}{2}$ per cent. An additional quarter or half per cent. was taken on account of *patwari's* stationery. It was impossible to meet the expenditure, which the present standard of revenue work demands, with so light a cess, and the rate was in recent settlements increased, $6\frac{1}{2}$ per cent. being commonly taken‡. By section 29 of the Land Revenue Act the highest amount that can be levied as village officer's cess is $6\frac{1}{2}$ per cent. on the “annual value” of the land as defined in Act XX of 1883 (see paragraph

*Section 3 (9) of Act XVII of 1887 and 4 (11) of Act XVI of 1887.

†Government of India, No. 5—794, dated 22nd August 1872.

‡See paragraph 576.

90 below). This was equivalent to $12\frac{1}{2}$ per cent. on the ~~land~~ revenue. But the *patwari* cess was entirely remitted in 1906, the village officer's cess being reduced to $2\frac{1}{2}$ per cent. on the annual value, where only the *pachotra* of ordinary village headmen has to be provided, and 8 per cent. where there are also chief headmen (Punjab Government Revenue and Agricultural Department notification No. 104, dated 2nd April 1906). Little use has so far been made of the power given by section 59 of the Canal Act to meet the whole or part of the cost of drainage projects by imposing a cess on the landowners, who are benefited by their execution. The Settlement Officer has nothing to do with the amount of such a cess, but he may have to make a distribution of it over holdings.

90. The local rate.—The Local rate has grown from small beginnings.* It was usual in early settlements to levy a road cess at one per cent. on the land revenue,† and subsequently education and postal or *dak* cesses, amounting to surcharges of one per cent. and one-half per cent.,‡ respectively, were added. During the Viceroyalty of Lord Mayo measures were adopted to give Local Governments greater powers as regards provincial expenditure. Financial pressure, however, forced the Supreme Government to make assignments to the Local Governments falling short of the estimated expenditure of the departments of which the charges were transferred to them. The gap had to be filled up somehow, and it was decided to meet the difficulty by imposing a local rate on land. Accordingly the levy of an additional cess, not exceeding six *pies* in the rupee of the annual value of the land, was authorized by Act XX of 1871. "Annual value" was defined as "double the land revenue for the time being assessed on any land, whether such assessment be leviable or not" (section 2). The local rate, therefore, amounted to a surcharge of $6\frac{1}{2}$ per cent. on the land revenue. The occurrence of severe famines in Bengal in 1874, and in Madras and elsewhere in 1877-78, led to the principle being laid down that "the periodical occurrence of famine ought to enter into the calculations of the Government of India when making provisions for its ordinary wants from year to year."§ To provide funds for this object the local rate was raised by Act V of 1878 from six *pies* to eight *pies* per rupee of annual value, or from $6\frac{1}{2}$ to $8\frac{1}{2}$ per cent. on the land revenue, and a license tax on trades was imposed. The famine cess was abolished in 1906.

91. Act XX of 1883.—When the District Boards Act (XX of 1883) was passed the opportunity was taken of amending the definition of "annual value," by declaring that term to mean double the land revenue, or, in areas where the water-advantage or owner's rate system was in force, double the sum made up of the land revenue and the rate.|| The road, education,

*See paragraph 365.

†See Circular No. 392, dated 19th July 1849, of the Board of Administration. The cess was regarded as a commutation of the labour which "by constant practice of India" landowners were expected to furnish in order to keep the roads in their estates in order (Cust's Revenue Manual, page 173).

‡Punjab Government No. 876, dated 27th November 1868, ordered that, where a *dak* cess was not already levied, it should be imposed at settlement.

§See statement of Objects and Reasons appended to the Bill and compare the preamble of the Act (V of 1878).

||For the complete definition, see section 3 (4) of the Act.

and postal cesses were at the same time merged in the local rate, and the legal limit of the latter was raised to $6\frac{1}{2}$ per cent. on the annual value, which is equivalent to $12\frac{1}{2}$ per cent. on the land revenue and owner's rate, or $1\frac{3}{4}$ per cent. in excess of the amalgamated local rate and minor cesses. But when the bill was discussed in the Legislative Council it was explained by the Member in charge of it (the Hon'ble Mr. Barkley) that "one *anna* has been adopted as the maximum partly for the sake of simplicity and partly because, in some districts, where the land revenue is small and lightly assessed, it may be found advantageous to have the power somewhat to increase the rate in order to provide funds for purposes clearly for the benefit of the neighbourhood. In other places some reduction of the rate may be desirable." The power given to increase the actual burden on the land was not immediately exercised, and the percentage at which the local rate was levied almost everywhere throughout the Punjab was Rs. 5-3-4 per cent. on the annual value, which is a lower rate than the combined amount of the local rate under Act V of 1878 and the three minor cesses.* The quarter share of the old cess, which had been allotted to the Local Government in 1882, was by Section 9 of Act XX of 1883 replaced by an approximately equal contribution of one-fifth out of the proceeds of the new local rate. The rate was reduced by one-fifth with effect from 1st April 1906 as the result of the abolition of the famine cess, and the legal maximum reduced from one *anna* to ten pies per rupee of annual value by Act II of 1906. In 1922 the rate was fixed at a maximum of twelve pies and a minimum of ten pies per rupee of the annual value.† All district boards have now raised the rate to the maximum. The whole of the rate now goes to district boards, except in cases where Government have issued a direction under section 9 of the District Boards Act (XX of 1883), that the rate on lands within certain specified urban areas shall be credited to the funds of the urban local body concerned. Government have not so far adopted any universal policy in this connection, as there are many divergent factors to be considered. In colony towns, where land revenue, and consequently local rate, is assessed on building sites as well as on agricultural land, there is generally no justification for the rate being credited to district boards, but in other towns, where the rate is assessed on agricultural land only, it is generally very small in amount, and it is often found that the district board maintains institutions, particularly in the smaller towns, on which its expenditure is far in excess of its receipts from local rate within the urban limits. In such cases no justification for a direction under section 9 arises.

92. Cesses on State lands.—Cesses may be levied on State lands, which, being under the control of district officers, are leased to private individuals or contractors; but no cesses may be levied on State lands administered in the Revenue or Military Department which are actually in possession of Government Officers, or used *bona fide* for Government purposes, or on lands reserved and placed under the control of the Forest or of the Irrigation Department, whether held under direct management by those Departments or leased to private individuals or contractors.

*Punjab Government notifications No. 208, dated 9th October 1889, and No. 272, dated 2nd December 1889. There was an infinitesimal increase in a few districts, elsewhere there was a small decrease (Punjab Government No. 211, dated 9th September 1889).

†Inserted by section 4 of the Punjab Act, XI of 1922.

93. The malba cess.—The *malba* cess is in its nature wholly different from the other “rates and cesses” described above. Its amount and its expenditure are matters with which the Government has no direct concern. It is a “village cess” according to the definition of that term given in the Land Revenue and Tenancy Acts, but it was classed among “rates and cesses,” because occupancy tenants, who hold at rents fixed in terms of the land revenue and cesses, usually contribute to the *malba*. The *malba* is the fund into which the common income of the village community from all sources is paid, and out of which its common expenses are met. These latter properly consist of such items as the cost of repairing survey marks, the fees due on account of warrants issued for the payment of arrears, the expenditure incurred by the headmen when they go to the *tahsil* to pay in the revenue, the entertainment of passing strangers who put up in the village rest-house, and, occasionally, grants of money, &c., to village shrines or holy men.* At one time it was considered part of the duty of the *patwari* to keep the *malba* accounts,† but the people should be left to make whatever arrangements they think proper. The receipts and disbursements are usually entered in the books of a village shopkeeper and the expenditure managed by the headmen, but the right of any landowner to demand an account is generally recorded in the village administration paper. The necessary amount is sometimes raised by distributing the exact sum required periodically over the landowners (*kacha malba*), in other cases a fixed percentage on the revenue is charged (*pakka malba*). The former plan is some check upon petty peculation by the headmen, and should not be set aside if the people desire its continuance. It may become unsuitable where any considerable part of the land has passed into the hands of non-resident purchasers or mortgagees, who find it easier to evade the duty of contributing to village expenses if their liability is not commuted into a fixed sum payable to the headmen along with the revenue and cesses. Certain orders on the subject of the *malba* were issued by the Financial Commissioner in 1860 (Book Circular IV of 1860), but they should not be regarded as of strict obligation, for it is now thought best to interfere as little as possible in a matter of this kind.‡ It is not safe, moreover, to assume, as is done in these orders, that the proportion which the *malba* cess should bear to the revenue will be lowest in the largest villages. It is such villages which have to spend most on hospitality. The requirements depend on many things, such as the amount of other common income, the position of the estate, &c.

The Settlement Officer should record in the *wajib-ul-arz* existing usages relating to the *malba*, or, if these cause dissatisfaction, and there is a general desire to alter them, he may properly assist the people to make better arrangements for the future. But his interference should be confined within the narrowest possible limits, and should be exercised by way of friendly counsel, and not of authoritative direction.§

*For interesting samples of actual *malba* accounts of a Hindu and a Muhammadan village, see Appendix XVII of Mr. Maconachie's Settlement Report of Delhi.

†See paragraph 51 of the vernacular *Dastur-ul-Aml Patwarian*, published in 1876.

‡See paragraph 96 below.

§See Punjab Government No. 196, dated 18th October 1893.

94. Village cesses.—All the cesses noticed above are charges for which landowners are liable. But there is another class of cesses which they themselves sometimes realize from the other residents in the village or from particular classes of residents, or from persons making use of the village lands. These are called in the Land Revenue Act “village cesses.” It is convenient to notice them here, but, strictly speaking, they should be described in the next chapter, which deals with the rights of landowners. According to the interpretation clause village cess “includes any cess, contribution or due which is customarily leviable within an estate, and is neither a payment for the use of private property or for personal service nor imposed by or under any enactment for the time being in force”; and section 145 (4) and (5) provide that “the Governor-General in Council may, on a reference from the Local Government, declare whether any cess, contribution, or due, levied in an estate is, or is not, a village cess, and that such a declaration shall not be liable to be questioned in any Court.” Village cesses are really in their origin seigniorial dues, such as are found in primitive societies in which certain persons or classes are dependent on other persons or classes for protection. In their essence therefore they are property, just as much as the income directly derived from the land. Familiar examples are the *kudhi-kamini* or hearth cess of the Eastern Punjab, and the corresponding door cess (*hakk-buha*) in some of the western districts, the *kamiana*, *ahtrafi* or *muhtarafa* paid by artisans to the proprietors of the village in which they ply their trade (*hirfa*), the *dharat* or weightment fee levied on sales of village produce, and marriage fees known by various names, such as *puch bakri*, *thana patti*, &c.*

95. Legal provisions as to village cesses.—The rules under the Land Revenue Act of 1871 required Settlement Officers to notice in the *wajib-ul-arz* any cesses paid to the proprietors by the non-agricultural community or by cultivators. Section 145 of the present Land Revenue Act (XVII of 1887) provided that—

(1) At any of the following times, namely :—

- (a) when a record-of-rights is being made or specially revised for an estate,
- (b) when the local area in which an estate is situate is being generally re-assessed and before the assessment has been confirmed,
- (c) at any other time on an order made with respect to any estate by the Local Government, with the previous sanction of the Governor-General in Council,

a revenue officer shall prepare a list of village cesses, if any, levied in the estate which have been generally or specially approved by the Local Government or the title to which has before the passing of this Act been judicially established.

(2) When a list has been prepared for an estate under sub-section (1), a village cess not comprised therein shall not be recoverable by suit in any Court.

*An interesting account of village cesses in the Shahpūr district will be found in the Punjab Revenue Proceedings, Nos. 25—32 of October 1893, and there is a good description of *dharat* in paragraph 86 of Mr. O'Dwyer's Settlement Report of Gujranwala.

- (3) The Local Government may impose on the collection of any village cess comprised in the list such conditions as to police or other establishments connected with the village market or fair in or on account of which the cess is levied, as it thinks fit.

These provisions were copied from the revenue law in force in the United Provinces.* But it was felt to be wrong in principle to make the exercise of a right depend upon the care with which the administrative act of preparing a particular record had been carried out, and the 2nd clause of section 145 has been repealed by section 3 of Act XVII of 1896. So far no action has been taken under section 145 (3).

96. Present policy of Government as regards village cesses.—

The latest declaration of policy as regards the *malba* and village cesses is contained in Punjab Government No. 196, dated 15th October 1893. In that letter Sir Dennis Fitzpatrick expressed his entire agreement in the views set forth by Sir Denzil Ibbetson in the annexed passage from a letter written by him as Commissioner of Rawalpindi with reference to a proposal to abolish certain village cesses and to take advantage of the power given by section 145 (3) of the Land Revenue Act to regulate the expenditure of any which were allowed to be levied, including the *malba*.

“I do not agree that in respect of such matter.....‘it is high time that village administration in the Punjab were put under law and rule, and not left to vague custom.’ I do not agree that it is necessarily ‘objectionable to continue a system by which one class of subjects are allowed to tax another class for the benefit of their own pockets.’ Directly we make rules, we limit powers. Our village system is fast falling into decay, but I do not think it has yet gone so far that we should give up, as beyond hope, what has always been looked upon.....as one of the most valuable characteristics of Punjab society.....The levy of small dues by the proprietary body from the other inhabitants of the village, and the discretion allowed within wide limits to the village headmen in the management of the village income and expenditure, are two of those remnants which have survived almost unimpaired. Every day the accidental spirit that is spreading so fast threatens them, and it will probably overwhelm them eventually, but I would do nothing to hasten the process. Moreover, I do not think that we could interfere either wisely or effectively. The dues in question have been realized in one village or another for generations past, and the people are accustomed to them. In each village, a customary distribution has grown up by which certain common expenses are defrayed from certain items of common income. This allotment of income differs from village to village; it is often based upon, and adapted to, local peculiarities and it is always understood and generally accepted by the villagers. I object to any attempt to introduce uniformity in such matters. We cannot know the facts fully. We should upset long-standing custom, disturb men’s minds, give rise to heart-burnings and litigation, and do infinitely more harm than good.”

*Section 68 of Act XIX of 1873 as amended by section 8 of Act VIII of 1879, Of paragraph 142 of Directions for Settlement Officers (Edition of 1850) and section 9 (1) of Regulation VII of 1822.

97. Cesses levied by jagirdars.—Where cesses of the kind noticed in the foregoing paragraphs are levied by *jagirdars*, the same considerations do not apply. Strictly speaking it is only where a *jagirdar* is found to be in possession of some sort of superior proprietary title, that his right to levy cesses would ordinarily be admissible. Few, if any, undecided cases can now remain. The question has been dealt with in recent years in connection with the settlement of some of the Kangra *jagirs* and of the *jagir* of the Khatak Khan in Kohat.*

*See Punjab Government Revenue Proceedings Nos. 1—12 of January 1892 and Nos. 19—31 of March 1893, and Foreign—Frontier Proceedings Nos. 26-27-A. of March 1896 and Nos. 97—102 of January 1895.

BOOK II.—The record of rights.

CHAPTER VIII.—Of tenures and the rights of landowners.

98. It must be decided at settlement who is responsible for payment of revenue.—A settlement which merely determined the revenue to be paid, without at the same time recording who should be responsible for its payment, would obviously be a futile operation. That the Settlement Officer should draw up a statement of the persons who engaged to pay the dues of the State was essential, and it came in time to be seen that it was desirable to give him power also to determine what were the rights in the soil of different individuals.

99. Importance of making landowners directly responsible for payment.—In ordinary circumstances the persons to give the State its share of the produce are evidently those who are found to be in possession of an exclusive right to till the soil and reap the harvests themselves, or to make it over to others for tillage. To be allowed to engage for the payment of the revenue naturally implies that the engager will have the power to arrange for the cultivation of the land, and, whenever the engager and the rightholder have been different persons, the tendency has been for the former to encroach upon the privileges of the latter and finally to destroy them altogether. Section 61 of the Land Revenue Act, therefore, very properly declares that “the landowners shall be liable for the land revenue.”

100. Importance of clear determination of rights in land.—It became necessary, therefore, to determine who were in possession of such permanent rights in the soil as to entitle them to engage. Such persons were, in Western phraseology, said to have a proprietary right in the land. Whenever, by the limitation of the Government demand and the establishment of order, rights in land became valuable enough to be an object of desire, it was important for the peace and prosperity of the country that they should be clearly defined.

101. Experiment of leaving the determination to the civil courts failed.—The experiment of leaving such matters to the arbitrament of the civil courts was tried and failed. These courts had not the knowledge requisite for the disentanglement of a confused web of rights in the soil which were often ill-defined and apparently contradictory, and they could derive small assistance from codes of Hindu and Muhammadan law or from the legislation of the British Government. Moreover, they could only deal with cases as they arose, and what was wanted was a determination, once and for all, of the rights existing in every field in every village in the country.

102. The task entrusted to Settlement Officers.—The decision embodied in Regulation VII of 1822, to entrust the task, in the first instance, to the officers engaged in the assessment of the land-revenue was a statesmanlike one. At the same time it was not unattended with danger. If

the action of the courts was too slow, that of the Settlement Officer might be too summary. Individual idiosyncracies and theories of what was best for the country were apt to lead men to disregard or to curtail rights which they thought to be antiquated or hurtful, to exalt one class in the community and to depress the status of another. Sympathy with old tribes and families which had been the victims of the political and social convulsions preceding our rule, led one man to seek to revive dormant rights, and sympathy with the actual tillers of the soil induced another to treat lightly rights which still had a substantial existence.* Some security was provided by declaring that the Settlement Officer's proceedings "shall be founded on the basis of actual possession,"† and by allowing a man who was dissatisfied with his decision, or who claimed a right of which he was admittedly not in possession to bring a suit in a civil court.‡ No doubt the result was not perfectly uniform, or even in all cases perfectly equitable, but the vital end was secured of settling titles in land on a stable basis.

103. Advisability of recording all rights in land, and the customary rights and obligations of all classes in villages.—It soon became apparent that the tenure of land was sometimes very complex, and that the proprietary right was not enjoyed as a whole by a single individual or by a village community in common, but was split up among two or more individuals possessing titles, none of which could properly be regarded as full ownership. The tenures of land under which the proprietary right is divided will be described later on. It is enough to say here that three classes were early recognized, superior proprietors or *talukdars*, inferior proprietors, and hereditary tenants. All these classes had permanent rights in the soil, the record of which was essential. By showing as separate holdings the fields held by each tenant-at-will under each landowner and noting the rent paid in each case, and by exhibiting in a separate statement the customary rights and liabilities of all members of the village community in its widest sense, including owners, hereditary tenants, tenants-at-will, shopkeepers and menials, the record was made complete.

104. Framing of record extremely important in first regular settlements.—In the first regular settlements in the Punjab the framing of the record of rights was a more important matter than the assessment. The result of the one operation was permanent, and for all practical purposes final, the result of the second was temporary and remediable.

105. Large powers in land cases given to the first Settlement Officers in the Punjab.—The judicial powers conferred on Settlement Officers for the determination of titles in land were very large. In fact the policy adopted was to give them exclusive jurisdiction in land cases and to put off any final decision as to rights in the soil till a regular settlement could be undertaken. The orders on the subject are referred to in Appendix IV. Their practical effect was that the entries in the record of rights, as it stood when settlement operations came to an end, were

*See e.g., paragraph 260 of Brandreth's Settlement Report of Jhelum and paragraph 33 of Colonel Lake's review of Cracroft's Settlement Report of Rawalpindi.

†Regulation VII of 1822, section 11, compare section 13.

‡Regulation VII of 1822, sections 13 and 14.

conclusive as to the rights of all persons having permanent interests in the land.

106. Doubtful condition of rights in soil at annexation.—

The task which the first Settlement Officers had to perform in connection with the determination of titles was no light one. Rights in the soil were found to be in a very confused and doubtful condition. It would however be a mistake to suppose that land ownership is either a creation of our rule, or that, having existed previously, it had been entirely destroyed by the rough domination of the Sikhs.

107. Temple's account of the effect of Sikh rule on property.—

Sir Richard Temple, when reporting in 1851 on the first regular settlement of Jullundur, gave an excellent account of the effect of Sikh rule in that part of the Punjab, and of the popular ideas which he found to exist as to property in land. After describing the heaviness of the demand and noting that joint responsibility for its payment was not enforced, he went on to say :—

“ It may be held that the cultivator must get one-half the produce to sustain life and carry on the cultivation and.....if the State takes all the remaining half, nothing is left for the proprietor.....If the proprietor cultivates he gets only his share as cultivator.....If the matter is looked at in this light, it may be thought that the Sikhs practically at least disregarded proprietary right, and that.....ownership was nothing more than an empty name.....Such was indeed too often the case. Still I maintain they attached to *maliki* or proprietorship the same ideas as we do, and theoretically at least recognized its existence.

108. Position of cultivators and proprietors in Jullundur under Sikh rule.—“ In most cases no party other than the occupants claimed any proprietary title.....These cultivating communities indeed paid as much as the merest tenants-at-will, and, if any portion of the estate failed, the *kardar* acted very much as if he had been proprietor and undertook the immediate management. However, as long as the community paid all their taxes and kept up their estate in a high state of cultivation he never interfered.....Indeed he would assist them in preserving their organization, adjusting their shares, and so on.....

“ But in those estates where there was a party in the position of proprietor, he was allowed to accompany the tax-gatherers when they went their rounds and, after their demands had been satisfied, he might glean a scanty *serina* or a certain number of *sers* out of the maund.....It will be marked that under the *kankut* and *batai* system the Sikhs always realised their revenue from the cultivator. The proprietor, when there was one, might collect something on his private account, but he was not expected to pay the revenue.....A non-resident *malik* was almost a nonentity.....without the power to interfere in the management of an estate, which indeed he could scarcely call his own. His perquisites were certainly precarious, and probably very inconsiderable.....The cultivator, while he held the position also bore all the burdens and calamities of a *malguzar*. He it was who withstood the incessant drain of presents, cesses and extra collections, who bribed the *kanias* and *chaudhris*, and who fed the hungry retainers of rapacious *kardars*. But in estates where the

Government demand was more moderate, the proprietors, being generally *chaudhris* or *mukaddims*, were able to assert their rights, and, moreover, their rights were worth asserting. If the collections were in kind, the Government would still realize direct from the cultivator, but the proprietor would take some interest in the collections, would hold himself responsible that nothing went wrong, would bring the waste into cultivation..... replace absconded cultivators, etc. Then, perhaps, a money commutation would be effected, and in such a case the proprietor would himself engage for the payment of the revenue. Still if he chose he might allow the cultivators to engage and content himself with the receipt of his *malikana* dues, and his title would be in no wise alienated or even weakened thereby.....In these kinds of cases, however, the proprietor was exposed to one kind of risk. If the proprietor, having accepted one *jama*, was outbid by some one else who offered more (than he was prepared to give).....it would be very uncertain whether he would ever afterwards regain his hold upon the estate. But such instances would be very rare.....

109. Engagements for payment of revenue sometimes taken from non-cultivating proprietors.—"The practice of Misr Rup Lal exactly illustrates the system which recognized two parties in an estate.....Some of his *pattas* are extent, in which it is declared that the engagements have been taken from certain parties, cultivators, while an additional amount is to be levied as payable to certain other parties, proprietors.....He fixed moderate *jamias*.....The proprietors, broken by long misfortunes, were often content to receive their *malikana* and forego the privilege of engaging. But sometimes this privilege would be contended for.....The Misr, perhaps, thought that the cultivators were the fittest persons to engage, and closed with them. Then the proprietors would appeal to Lahore, and. . . . a warrant would come from the Maharaja setting forth that whereas certain parties, cultivators, had been admitted to engage, to the exclusion of certain other parties, who were proprietors, and claimed their right to engage, therefore the engagements concluded with the former were to be cancelled. . . .

110. Sikhs did not ignore property in land.—"From the tenor and tone of. . . . public documents, it is clear that the Sikh rulers did. . . . look upon private property.....as a matter of original abstract right, which was coeval with Government and society, (and) had been recognized by all dynasties.....Authenticated deeds of sale and other transfers were regarded not as obsolete nullities applicable to a system that passed away with the Government from which it sprung, but as instruments of immutable validity.....

111. Popular ideas of proprietary right.—"I have yet to consider what was the popular notion of proprietary right, and in what way (the people) recognized it among themselves independent of any public sanction it might receive. The *kan batai* system was of course, unfavourable to the development or organization of co-parcenaries.....still the huge *malba* had to be portioned out, and hence the various methods of allotments by *hals* (ploughs), &c.....were brought into play. In fine *bhaichara* estates, where, from the influence of the *chaudhris* or from

any other cause, a moderate money revenue had been fixed, the regular machinery of dividing the common profits and stock, the community of interest and responsibility, the links which unite the several parts together have been just as discernible as in the *bhaiachara* estates of Hindustan. The shares were ancestral. Circumstances might have changed the relative proportion of the actual shares..... But the ancient partnership was preserved in the remembrance of the brotherhood. Its restoration was often deemed a matter of family concern and honour, and recurrence to it was deemed natural and proper, if circumstances should permit or opportunity offer. The fluctuations of individual fortune might often render it convenient that some should take more, and others less, land than their original shares. But such interchanges were always open to re-adjustment, which was in most cases amicably effected. Otherwise the leading members of the brotherhood would interfere and, if necessary, invoke the *kardar's* aid. Stress of season and of taxation would often drive shareholders from their homesteads. The patrimony thus deserted fell into the hands of the nearest of kin. But it was held merely in trust, and must be restored intact to the refugee whenever he might return..... Amidst all the alterations of cultivation and dispossession, the shares in the common lands and in the common liabilities remained unchanged. The revenue responsibility indeed must coincide with actual possession, and this is merely a corollary of the *kan batai* system. But joint profit and loss were shared in another way. The owner of $\frac{1}{3}$ rd share might only cultivate $\frac{1}{3}$ th and pay revenue accordingly. But he would get $\frac{1}{3}$ rd of the common stock and bear $\frac{1}{3}$ rd of the village expenses.....

112. Transfers of land and exclusion of strangers.—"When the proprietors were not in direct possession of the land, one partner might transfer his share to an alien. But such transfers would rarely have much effect, and would often be fraudulently made in favour of persons supposed to be capable of ejecting the cultivators. Strangers were jealously excluded from cultivating communities, and what is known as the right of pre-emption was closely watched. Transfers among the members of the community by gift, bequest, mortgage, or sale, were not unfrequent.

113. Importance attached to construction of wells as an evidence of proprietary right.—"In a country where much depends on artificial irrigation.....the building of a well was the first attribute of a proprietor, and its existence was the best proof of his title. Communities of cultivators, who saw that the landlord's hold on the estate was getting weaker, were eager to build wells and thereby found a proprietary claim in spite of the landlord's opposition.....The proprietors were reluctant to allow a cultivator to sink a well, plant a grove, or lay out a garden.".....

114. Effect of Sikh rule on property different in different parts of the country.—This is a faithful picture, but it does not represent the state of things existing everywhere in the Punjab at annexation. It is convenient to talk of the Sikh system and of its effects; and certain broad features can be recognized as characteristic of Sikh rule everywhere. But there was no common scheme of revenue administration. Each Governor, and to some extent each *kardar*, each *jagirdar* and revenue farmer, had his

own system, and a change of officials meant a change of system. The general effect of Sikh rule was a levelling of old privileges and superiorities, but the process was carried to very different lengths in different places, and in the same places at different times, and the practical result was to increase the diversity of tenures that previously existed. There were parts of the country where the village bond was weaker than in Jullundur, or did not exist at all. There were parts where the rights of the older proprietors were overridden to a still greater extent, where, though not forgotten, they had ceased to be valued or asserted, because, in the emphatic language of Captain Hector Mackenzie, they had become "symbols more of misery than of benefit."* The *malik* or *waris*, descended from the original founder of the village, and the cultivator, whose father or grandfather had settled in it, were on a common level. "*Malikana* dues were unknown. Ancestral shares were forgotten or had fallen entirely into disuse. *Malba* was levied from both alike upon the extent of cultivating possession, so (were) the revenue, cesses, and burdens of every kind."† Even at the first regular settlements it was sometimes found that the people had "a horror of money settlements,"‡ and were little disposed to revive rights which had been wholly or partially in abeyance.§ On the other hand, there were, as will appear in the sequel, parts of the country where proprietary rights existed in a higher degree than in the Jullundur *doab*, and where a class interposed between the State and the cultivators whose claims could not be ignored.

115. Privileges conceded by the Sikhs to mukaddims, maliks, &c.—Where the Sikh rule was most levelling in its character there were still men who held their heads above their neighbours. They did so rather in virtue of official position than of ancestral right, though the position was usually conceded to them on account of local influence founded on old descent and hereditary connection with the land. Thus the *mukaddim* was generally also a *malik*, in the sense in which that word is used in the Western Punjab, where it implies, not proprietary right in the soil, but a position of authority in the tribe or community. "The Sikh Government took all they could from the cultivator, relaxing in favour of the headmen, *chaudhris*, *mukaddims*, &c., who assisted them in the process. To these they gave *inams*, or what comes to the same thing, they exempted a plough or two of their cultivation from assessment. And these headmen on their part managed the revenue for Government and village affairs for the community generally: for the latter they collected *malba* to defray the village expenses, perhaps something more which was illicit. They would manage the waste lands, call in cultivators, &c."|| Where cash assessments were made, the leading men or *maliks* in the different communities, who were already recognised as *mukaddims*, naturally took up the engagements. We have instances of this happening even after the establishment of British

* Mackenzie's Settlement Report of Gujrat, paragraph 160.

† " " " " " 169.

‡ " " " " " 134.

§ Seedman's Settlement Report of Jhang, paragraph 83.

|| Elphinstone's Settlement Report of Montgomery, paragraph 50.

¶ Mackenzie's Settlement Report of Gujrat, paragraph 166.

rule. Down to the end of the second summary settlement in Montgomery "it was the almost universal custom in the river villages for the headmen to pay the revenue and collect in kind from the other shareholders"* and as late as 1860 the Tiwana *maliks* were responsible for the payment of the revenue of a considerable tract in Shahpur.† The concessions that the Sikhs found it prudent to make to families of local influence were sometimes very considerable. A quarter or more of the ruler's share was surrendered to certain families under the name of *chaharam*.‡

116. Investigation of claims to proprietary right by early Settlement Officers.—Another quotation from Temple's report may be given to show exactly what Settlement Officers had to decide, and the spirit in which the task was undertaken :—

"The broad question at issue has been this—who has held the land and paid the revenue for twelve years previous to the present settlement? Discrimination has been exercised not only in tracing the foundations of original right, but also in discovering the signs and tokens of *bona fide* possession..... We have been anxious that every claim and right, whether admitted and confirmed or not, should at least be understood. Ancient rights that have long been held in abeyance must sometimes be extinguished in deference to law and policy. But we have never non-suited claims by technicalities."§

117. Tendency to favour the claims of the actual cultivators of the soil.—It is not to be expected that in the conflict between old rights, which had been partially in abeyance, and new ones which were for the first time becoming profitable, exactly the same course would be followed in settlements made at various times by different officers. The tendency was to commute the superior rights where they were established into a moderate percentage on the revenue, and to take engagements from the inferior proprietors and allow them the sole management of the estate. The latter were looked upon as the valuable element in the community, the former as an interesting survival of a state of society which had passed away and should not be revived. Still less were our officers disposed to assist in the process which had been making the *mukaddims* or headmen, virtual proprietors in some parts of the country; and the allowance of 5 per cent. on the revenue, which they were allowed to collect from the community as *lambardar's* fees or *pachotra* was a small recompense for the privileges which they were forced to relinquish.

118. Change in official opinion after Mutiny.—The policy of the settlement of rights in land effected in the Punjab described in the preceding paragraph was brought from the North-Western Provinces, where

*Settlement Commissioner's (Mr. Lyall's) Review of Purser's Settlement Report of Montgomery, paragraph 5. Compare paragraph 101 of Tucker's Settlement Report of Dera Ismail Khan.

†Davies' Settlement Report of Shahpur, paragraph 194.

‡Cracroft's Settlement Report of Rawalpindi, paragraph 329, &c.
Brandreth's Settlement Report of Ferozepore, paragraph 200.

Karnal-Ambala Settlement Report, paragraphs 96-97.

§An excellent idea of the kind of work which a Settlement Officer had to do in the North-West of the Punjab, when framing a record-of-rights at a regular settlement, can be got by reading paragraphs 284-306 and 310 of Cracroft's Settlement Report of Rawalpindi.

the circumstances were different. As applied to this province it was on the whole a healthy one, but it may be doubted whether it was not sometimes pushed too far. After the Mutiny a considerable change in official opinion is observable, but it was then too late to disturb, to any substantial extent, the settlement of titles that had been made.

119. General description of rights in land.—A general description of the rights in land which have been commonly found to exist will be useful. The object with which it is written is the practical one of enabling officials to recognise and understand tenures with which they may be brought into contact in their daily duties. An attempt will be made to indicate the general type of the tenures in different parts of the province. For details reference must be made to settlement reports and gazetteers. Attention will be confined to tenures as they exist now, or have existed in very recent times, speculations as to their origin being for the most part ignored.

120. Main features of proprietary right.—It is unnecessary to attempt any exact definition of proprietary right in land in Northern India. The preceding paragraphs have shown what is its general nature. As enjoyed by private individuals it nowhere amounts to full ownership, except where the land-revenue has been redeemed. Its main features are—

- (a) that the right-holder is entitled to the use and occupation of the land during his lifetime ;
- (b) that on his death this title passes to his descendants, subject to customary rules of inheritance, which usually exclude females ;
- (c) that the right-holder is entitled to let the land to tenants on such terms as he thinks fit ;
- (d) that the right-holder can sell or mortgage the land subject to customary and legal restrictions which give to members of the same family or village community a right to interfere in certain circumstances. This right is based originally on kinship, real or assumed, and not on any claim on the part of the objector to a superior title. Mr. Thomason regarded freedom of transfer as a necessary feature of proprietary right. But the Indian idea of property in land is that it is vested in a family, and not in an individual. In many parts of the country the possession of unlimited powers of alienation by the recorded right-holder was entirely opposed to native sentiment, and restrictions on the power of alienation have never been wholly wanting in the Punjab, and have been greatly extended by the Alienation of Land Act, XIII of 1900 ;*
- (e) that the right-holder is entitled to engage for the payment of the land-revenue.

This last feature of proprietary right is mainly the creation of our rule. The Land Revenue Act does not attempt a definition of "landowner."

*See Chapter II of Land Administration Manual.

It merely states that the term "does not include a tenant or an assignee of land-revenue, but does include a person to whom a holding has been transferred, or an estate or holding has been let in farm, under this Act for the recovery of an arrear of land-revenue.....and every other person not hereinbefore in this clause mentioned, who is in possession of an estate or any share or portion thereof, or in the enjoyment of any part of the profits of an estate."* Of course some of the persons included are only "land-owners" for the purposes of the Act.

121. Ownership undivided or divided, and communal or non-communal.—Maine has observed that "the rights of property are..... a bundle of powers capable of being mentally contemplated apart and capable of being separately enjoyed."† Where an individual or a community is found in possession of all the privileges which have been noted above as the marks of proprietary right, he may be said to enjoy, subject always to the lien of the State on the produce of the soil, complete ownership. But the individuals who occupy the land and pay the revenue may be bound to render certain dues to another person, who is known in the language of revenue codes as a superior proprietor, or *ala malik*. The latter's interest in the estate may be limited to the receipt of this quit rent, or he may have considerable rights over the waste lands included within its limits, though he has no power of interference in the management of the cultivated holdings. Or, on the other hand, the man who pays the revenue of the land may have no right to till it, but merely to receive a rent fixed by authority from a cultivator who has been held to have a permanent and heritable right of cultivation. Such a cultivator is known as an occupancy tenant. He enjoys a share of the proprietary right, and the distinction between him and an inferior proprietor (*adna malik*) is not a very broad one. Wherein it consists will appear in the sequel. This gives us one primary division of ownership into complete or undivided, and incomplete or divided. Moreover, the land of an estate may be held by a community jointly responsible for the payment of the land revenue, holding part of the estate in common, and raising a certain amount of money for common expenses. Or again each holding may be a separate unit of which no part is subject to common rights, and whose owner is responsible for its revenue and for nothing further. The former which may be called the communal tenure, is the form which property has taken in the village communities of a large part of the United Provinces and the Punjab. The latter is very similar to the well-known *raiayatwari* tenure of Southern India.‡ It exists here also in law and in fact in the *malik kabza* tenures which are common in the Rawalpindi division and not unknown elsewhere. It exists in fact, if not in law, throughout a considerable part of the south-western Punjab.

122. Classification of different kinds of proprietary right.—Proprietary right may therefore be classified as—

(1) Undivided ownership—

(a) Communal. Example—village community in which there are no superior proprietors or occupancy tenants.

*Section 3 (2).

†Maine's Village Communities, 5th edition, page 158.

‡See Baden Powell's Land Systems of British India, Vol. III, pages 128, 130.

(b) Non-communal. Example—*malik kabza*.

(2) Divided ownership—

- | | | |
|--------------------------------------|----|------------------------------------|
| (a) Superior or <i>ala malik</i> .. | .. | { 1. Communal.
2. Non-communal. |
| (b) Inferior or <i>adna malik</i> .. | .. | { 1. Communal.
2. Non-communal. |
| (c) Occupancy tenant. | | |

The tenures of superior and inferior proprietors may be either communal or non-communal,* but each occupancy tenant is only responsible for the rent of his separate holding, and though he may have rights of user in the village common land, they are merely appanages of his cultivated holding, and have no communal character.

123. Mauzas or villages and mahals or estates.—Before describing the village community it will be convenient to explain exactly what is meant by the two terms *mauza*, which is usually translated “village,” and *mahal*, of which the English equivalent is “estate.” A *mauza* is defined by Mr. Thomason as “a parcel or parcels of land having a separate name in the revenue records and known limits,” and a *mahal* as “any parcel or parcels of land which may be separately assessed with the public revenue, the whole property of the persons settled within the *mahal* being held hypothecated to Government for the sum assessed upon it.” There are two elements in this definition, the separate assessment, and, where more than one person own the same estate, their joint responsibility for the payment of its revenue. “Village” is not defined in the Land-Revenue Act, but the meaning of “estate” is explained to be “any area—

- (a) for which a separate record of rights has been made, or
- (b) which has been separately assessed to land revenue, or would have been so assessed, if the land revenue had not been released, compounded for, or redeemed, or
- (c) which the Local Government may, by general rule or special order, declare to be an estate.”†

The joint responsibility of all the landowners of an estate for its revenue is provided for in section 61 of the Act. In practice it is rarely enforced. A rule made under clause (c) of the section quoted above declares “all demarcated areas of uncultivated and forest land owned by Government” to be estates.‡

A village, as a rule, consists of a single block of land. But occasionally the whole of its land does not lie in a ring fence, and some outlying fields are found mixed up with the lands of another village.

124. The village and the estate generally identical.—Several estates may be included in a single village. This may be brought about by the process known in revenue rules as “complete partition,” by which

*An example of communal superior ownership is where the *ala maliks* collect their dues jointly from the *adna maliks* and divide the proceeds according to fixed shares, or where they are joint owners of the village waste.

†Act XVII of 1887, section 3(1).

‡Land Revenue Rule 31.

any one or more of the coparceners in a village community is able to separate off his or their lands and form them into a separate estate. This has led to a great multiplication of estates in the United Provinces. But complete partition has always been discouraged in the Punjab and is in fact very rare. Section 110 of the Land-Revenue Act provides that "a partitionshall not, without the express consent of the Financial Commissioner, affect the joint liability of the land or of the landowners thereof for the revenue payable in respect of the land, or operate to create a new estate." Hence in the Punjab "village" and "estate" are, as a rule, merely terms for the same property viewed under different aspects. Settlement Officers sometimes find it expedient to divide an existing village into two separate estates, but they must remember that they have no power to do so of their own authority. On the other hand it is occasionally advisable to combine two estates into one. This also requires the sanction of the Financial Commissioner.*

125. Definition of holding.—Holding is defined as "a share or portion of an estate held by one landowner or jointly by two or more landowners."†

126. The village community.—A village community is a body of proprietors who now or formerly owned part of the village lands in common, and who are jointly responsible for the payment of the revenue. As time goes on the tendency is for the area held in severalty to increase, but it is rare indeed to find a village, which was one of the communal type, in which there is no common property remaining. Joint responsibility has been made a prominent feature of village tenure by the British Government. Under native rule it did not exist when the State realized its dues by division of crop or by appraisement. Even when a cash assessment was made only a few leading members of the community became responsible and they generally occupied the position of revenue farmers in their dealings with the rest of the brotherhood. But joint responsibility occupies a far more prominent position in our codes than in our practice.

127. Reluctance to admit strangers.—The members of the proprietary body in a true village community are often united by real or assumed ties of kinship. The admission of strangers into the brotherhood was always, in theory at least, a thing to be guarded against, and village customs in the matter of inheritance and pre-emption are founded on this feeling.‡ But under native rule the repugnance to admit strangers often yielded to the pressure of the Government demand, and outsiders were allowed to share in rights which had become burdens. The almost complete freedom of transfer for long enjoyed in practice under British rule had a still more disintegrating effect on village communities. As will appear in the sequel there are parts of the province where village communities of the above type never existed and others where the village organization has fallen into a very decayed condition.

*Financial Commissioner's No. 6486, dated the 27th October 1904.

†Act XVII of 1887, section 3 (3).

‡The provisions regarding pre-emption in the Punjab Laws Act must not be accepted as a true representation of village custom. They have been superseded by those of Punjab Act No. 1 of 1913.

128. Division of villages into patties, &c.—Villages often consist of several main divisions known by various names such as *taraf*, *patti*,* or *pana*, and these again are sometimes divided into smaller sections (*thoks*, *thulas*, &c.). The lands of two *pattis* may be separate (*chakbat*) or intermixed (*khetbat*), and the proprietors of a *patti* may have common lands of their own and also a share in the general village common.

129. The village panchayat and the headmen.—The affairs of the brotherhood were formerly managed by an informal village council or *panchayat*. But this body was too numerous and loosely constructed to fittingly represent the community in its dealings with Government officials. A few of its leading members were, therefore, selected as headmen or *lambardars*, and the appointment of headmen naturally came to be confined to particular families. From a revenue point of view the most important function of the headmen is to collect the revenue from the coparceners and pay it into the treasury. The special position assigned to the *lambardars* and the action of our courts stripped the *panchayat* of its influence, and practically it has ceased to exist. The administration of the *malba* or fund out of which the common expenses of the brotherhood are met is usually left in the hands of the headmen, but it is generally recognized that each member of the proprietary body has a right to demand an account of its expenditure.

130. Residents in village communities who are not proprietors.—An Indian village community of the communal type was, and to a considerable extent is still, self-sufficing. Besides the land-owners it includes "a nearly complete establishment of occupations and trades for enabling them to continue their collective life without assistance from any person or body external to them."† There are hereditary artisans and hereditary menials who perform offices considered unsuitable or degrading in the case of landowners. For these there is generally a customary rate of payment, which usually takes the shape of allowances of grain according to a fixed scale at time of harvest. Where the land was abundant and the proprietary body small outsiders might be voluntarily admitted as cultivators or forced upon the community by the action of State officials. In the latter case the landowners were fortunate if they could secure some small grain fee at harvest as an acknowledgment of their superior title. Residents who are not landowners sometimes pay to the latter as a body or to their headmen petty fees periodically, or on special occasions such as marriages. The tendency of our administration and especially of our legal system has been to loosen the communal tie and to weaken the authority exercised by the proprietary body over its individual members and over the other inhabitants of the village.

131. The abadi.—The houses of the members of the brotherhood and of their dependents are usually built close together in some convenient part of the village. It may be noted that this inhabited site or *abadi* is excluded from the operation of the Land-Revenue Act "except so far as

*Where the term *taraf* is used for the main divisions, the sub-divisions are sometimes called *pattis*.

†Maine's *Village Communities in the East and West*, 5th edition, page 125.

may be necessary for the record, recovery, and administration of village cesses."* The houses of the village menials are usually placed on the outskirts of the *abadi*, and those occupied by men of impure castes sometimes occupy a separate site or sites at a little distance from it.

132. Degree to which separation of rights has occurred and rule determining the measure of right.—It is important to ascertain the extent to which the lands of a village community, or, as it is sometimes called, a coparcenary estate, are still held in common, and also the rule by which the measure of the rights and liabilities of the different shareholders and the division of the joint income are determined. Of the former every degree is recognized from complete commonality to complete severalty, but either extreme is rare. The rule which governs the measure of the rights of each member of the brotherhood is also far from uniform. The estate may be held in accordance with definite and well known customary shares or each man's occupancy may be the measure of his interest. The customary shares may be expressed in various ways, as by parts of a rupee, or of some common land measure, or by ploughs. Thus the whole estate may be regarded as consisting of twenty *biswas* or one *bigha*, of which each *patti* possesses so many *biswas*, and each individual shareholder so many *biswas* or *biswansis*.†

133. Ancestral and other customary shares.—In an estate in which the bond of kinship uniting the different members of the brotherhood is a real one, a Settlement Officer, with a genealogical tree of the land owners before him, may be able to see that the shares are really ancestral or, in other words, (a) that the owners all claim descent from a common ancestor who is alleged to have founded the village, or (b) that the original division of the estate was determined by the relationship which its founders bore to a common ancestor, and in either case that the subsequent devolution of property has been in conformity with the rules of inheritance followed in the tribe to which the proprietors belong. Ancestral shares were described by Mr. Thomason as "legal," as distinguished from "customary" shares which was the term he applied to those which were definite, but not apparently based on kinship. The distinction is real but not very important, and the contrast implied between "legal" and "customary" is unhappy. Ancestral shares may never have existed or may no longer be traceable. The first occupants of the village lands may have divided the property on a scheme of shares based on each man's ability to bring land under cultivation, though the subsequent descent of property has been in accordance with the ordinary rules of inheritance. The prevalence of a division on ploughs is probably an indication that this method of distributing the land was common.

134. Cases in which possession is the measure of right.—Again, no definite division by shares may ever have existed, and each man may simply have occupied as much land as he could manage. This will rarely if ever be found as an original feature of a communal village, but holdings

*Act XVII of 1887, section 4 (1).

†Shares should always be described in settlement records by the terms used by the owners, and great care must be taken that artificial complications are not introduced by Indian subordinates.

of this sort may subsequently be clubbed together into coparcenary estates by the action of Government officials. Or, where customary shares once prevailed, all use of them may have died out owing to the admission or intrusion of strangers into the brotherhood in troublous times or to other causes.

135. Official classification of village tenures.—The recognition of these features of village tenures has led to an official classification of them which is neither complete nor of much practical value, but which requires notice as it is often referred to in settlement literature.

Tenures are arranged under the following heads :—

- | | |
|-----------------------|--|
| (1) <i>Zamindari</i> | .. { (a) landlord (<i>khalis</i>).
(b) communal (<i>mushtaraka</i>). |
| (2) <i>Pattidari</i> | .. { (a) perfect (<i>mukammil</i>).
(b) imperfect (<i>na-mukammil</i>). |
| (3) <i>Bhaiachara</i> | .. { (a) perfect (<i>mukammil</i>)
(b) imperfect (<i>na-mukammil</i>). |

In the next few paragraphs free use is made of Mr. Barkley's edition of the Directions and of the excellent account of Punjab tenures which he wrote for the Administration Report of 1872-73, and which is quoted in full on pages 626—631 of the 2nd volume of Mr. Baden Powell's Land Systems of British India.

136. Zamindari tenures.—*Zamindari* tenures of the landlord type or estates possessed in full proprietary right by a single owner require no particular notice. Such tenures are not coparcenary. *Zamindari* tenures of the communal type are those in which the whole of the land is held and managed in common. Whatever land the owners cultivate themselves is occupied by them as tenants of the community. "Their rights are regulated by their shares in the estate, both as regards the extent of the holdings they are entitled to cultivate and as regards the distribution of profits, and if the profits from land held by non-proprietary cultivators are not sufficient to pay the revenue and other charges, the balance would ordinarily be collected from the proprietors according to the same shares."

137. Confusion in use of terms *pattidari* and *bhaiachara*.—Some confusion exists in the use of the words *pattidari* and *bhaiachara*. Thomason employed *pattidari* to include both, and *bhaiachara*, or custom of the brotherhood, means now something quite different from what it meant when first adopted as a revenue term. *Pattidari* was once applied only to estates held on ancestral shares, and villages in which other kinds of customary shares prevailed were called *bhaiachara*. But in the Punjab *bhaiachara* is restricted to tenures in which possession has become the measure of right, and all villages held on ancestral or any other well known scheme of shares are classed as *pattidari*. It is not always safe to assume that *pattidari* has the same meaning in an Act of the Legislature as it has in revenue rules or instructions.

138. Pattidari tenures.—Perfect or complete *pattidari* tenures are those in which all the lands are divided and held in severalty by the different proprietors according to ancestral or other customary shares, each person managing his own lands and paying his fixed share of the revenue, while

all are jointly responsible in the event of any one shareholder being unable to fulfil his obligations to Government. Tenures of this class are very rare. Where they occur the right of pre-emption and joint responsibility are almost the only ties binding the members of the community together. Imperfect or incomplete *pattidari* tenures are those in which part of the land is held in severalty and part on commonalty, and the interests of the landowners in both correspond to well-known customary shares.

139. Bhaiachara tenures.—In perfect *bhaiachara* tenures all the lands are held in severalty, but customary shares, if they ever existed, have disappeared and each man's holding, or rather the portion of the total revenue which he pays, has become the sole measure of his rights and liabilities. In a *pattidari* tenure the share regulates the revenue payable, in a *bhaiachara* tenure the revenue payable regulates the share. All are jointly responsible if any individual shareholder becomes a defaulter. The tenure of inferior proprietors in villages in the south-west of the Punjab consisting of groups of wells, where the waste belongs to the superior owners, is technically of this class, but joint responsibility is rarely, if ever, enforced. An imperfect *bhaiachara* differs from a perfect *bhaiachara* estate in exactly the same way as an imperfect *pattidari* differs from a perfect *pattidari* estate.

140. Many estates cannot be placed in any one of these classes.—It is often impossible to refer the tenure of a particular estate to any one of these classes, and a Settlement Officer must be on his guard against a tendency on the part of his subordinates to label a tenure by some familiar official term instead of carefully describing its actual incidents. One sub-division or *patti* may be *pattidari*, while another may be *bhaiachara*. In the case of the separate proprietary holdings possession may have become the sole measure of right, though the customary shares are not forgotten, and are recognized as governing rights in the common land and followed as the rule of partition when it comes to be divided. In our early settlements it was found that the people were sometimes willing to revert to the old customary shares even in the case of their separate holdings, but such a measure involves a disturbance of existing rights and can only be enforced with the consent of all concerned, which in these days would very rarely be obtainable.

141. Different forms of tenure not permanent.—The different forms of tenure described above are not in their nature permanent. An estate may easily pass from one class to another, the joint responsibility remaining intact. A landlord *zamindari* estate at once becomes a communal *zamindari* estate when the sole owner dies leaving several sons behind him. If they again effect a partition of any part of the joint property an imperfect *pattidari* tenure results. But the commonest of all changes is the passing of a *pattidari* into a *bhaiachara* tenure. As we have seen this may be caused by the exactions of a native government. Under our own rule the actual holdings may never have corresponded closely with the acknowledged shares, and, even if they did, the unequal improvement of different holdings and sales and mortgages of land to outsiders may have made the system of paying the revenue according to customary shares unsuitable. Accordingly when an estate is re-assessed and the new demand is distributed over

holdings, the amount of cultivated land of different classes in each man's possession and not his ancestral or customary share is made the basis of the calculation of the revenue which he shall in future pay. Under these circumstances a *bhaiachara* tenure is at once created, and as a rule each settlement shows a large addition to the number of estates classed as *bhaiachara*.

142. Malik kabza.—Owners are sometimes found in village communities who do not belong to the brotherhood and are not sharers in the joint rights, profits, and responsibilities of its members. Their proprietary title is a complete or undivided one, but it is confined to certain fields and does not include any share in the village waste. The name by which this tenure is officially known in the Punjab is *milkiyat makbuzaa*, and the holder of it is called *malik kabza*. These terms indicate that the interest of the proprietor is limited to the land actually in his own possession. This land he can let, mortgage, or sell as he pleases, and he is responsible for the payment of its revenue. A familiar instance of this form of landholding is the right acquired by a Brahman, who receives a *dohli* or death-bed gift of a small plot of land from a landowner. The tenure is also created whenever a landowner sells a part of his holding without the appurtenant share of the village common land. The *malik kabza* tenure is common in the districts of Gujrat, Rawalpindi, Jhelum, Attock and Hazara, where it was introduced at the first regular settlement under circumstances which will be described in a later paragraph. In some cases the status of *malik kabza* is combined with that of an inferior proprietor. The status of an assignee, or the heir of an assignee, who is recognized as owner of the plot which is, or was, held free of revenue, subject to the payment of a proprietary fee in recognition of the superior title of the village community, is of this description (see paragraphs 182—185). This mixed form of tenure is common in the Jhelum district.*

143. Superior and inferior owners.—Where the proprietary right is divided the superior owner is known in settlement literature as *ala malik* or *talukdar*, and the inferior owner as *adna malik*. The local names given to these tenures are not uniform. Thus in the Cis-Sutlej tract the superior owner is called *biswadar*, and the inferior *zamindar*. In the South-Western Punjab the latter title is appropriated by the superior owner, and the inferior proprietor is commonly described as *chakdar*. In cases of divided ownership the proprietary profits are shared between the two classes who have an interest in the soil. Occupancy tenants holding as privileged rents are in possession of a part of the proprietary right, but they differ from inferior owners inasmuch as their rents are within certain limits and under certain circumstances liable to enhancement, and their rights of transfer are subject to limitations based on the superior rights of another person, who is recognized as landlord.

144. Usual policy to make the settlement with the inferior proprietor.—As the greater part of the profits of landowning in India is derived from the limitation of the Government demand by the British Government, the question of the persons with whom settlement should be

*See paragraph 178.

made was, where the proprietary right was divided, a matter of great practical importance. In the Punjab, following the precedent of the United Provinces, it was almost invariably decided in favour of the inferior proprietor, the claim of the superior owner to a share of the crop being commuted into a moderate sum levied as a surcharge upon the revenue and calculated at a small percentage on its amount. The general effect was that the benefit of the action of the State in limiting its claim against the produce accrued almost entirely to the communities which we found in actual cultivating possession of the land. This policy represents the extreme rebound from that which in Lower Bengal, where the village system had broken down before annexation, transformed the revenue collectors of the Moghal Government into great landowners without affording at the same time any adequate protection to the cultivators. In any case in which the superior proprietor still continues to receive dues in kind these may be commuted by the Collector into a fixed percentage of the land revenue on the application of both landowners, or, with the previous sanction of the Local Government, on the application of either of them (section 146 of Act XVII of 1887). There are few, if any, cases now remaining in the Punjab in which the question with whom settlement should be made has not been decided. The Financial Commissioner has power to declare "by rule or by special order in each case" whether the superior or the inferior landowners shall be liable, or whether both shall be liable, and if so, in what proportions,* and he has framed a rule providing that, in the absence of any special order to the contrary, the inferior landowners shall be liable.†

145. Causes from which talukdari rights have sprung.—The circumstances from which *talukdari* rights have sprung are very various. In a good many cases the superior owners are the descendants of persons who once exercised political sway or enjoyed a lordship over the soil, from which they were ousted during the dominion of the Sikhs, though they managed to collect at harvest with greater or less regularity some small proprietary fee, such as a *ser* in every maund of the produce (*sermani*), from the persons in actual possession of the land. In other cases the connection of the ancestors of the present *talukadars* with the land was in its origin purely official. They were revenue farmers or *jagirdars* who enjoyed under native rule large rights of management, which grew into rights of property. These two sources of *talukdari* right were often united in a single individual.

146. Rights of inferior proprietors sometimes do not extend to the waste.—The rights of the inferior proprietors sometimes extend over the whole estate, including the waste. In other cases they are confined to the separate holdings, and the waste is at the disposal of the *talukdar* subject to certain rights of user enjoyed by the village community. In the latter case the rights of the inferior proprietors are not very different from those of the *malik kabza* described in paragraph 142, and his liabilities are not in practice much greater.

*Act XVII of 1887, section 61 (1) (b).

†Land Revenue Rule 51.

147. Division of the Punjab and North-West Frontier Province with reference to tenures into five tracts.—In a discussion of land tenures the province may be roughly divided into five tracts—

- (1) The plains of the Eastern and Central Punjab.
- (2) The Himalayan tract to the north of these plains in so far as it is British territory.
- (3) The Pathan tract lying mainly beyond the Indus and comprising the districts of Peshawar, Kohat, Bannu and Dera Ismail Khan.
- (4) The South-Western Punjab.
- (5) The North-Western Punjab and Hazara, embracing the districts of Jhelum, Attock, Rawalpindi, Gujrat, and Hazara.

It must not be supposed that definite limits can be assigned to divisions of this sort. Tenures do not adjust themselves to geographical, and still less to administrative, boundaries. All that is implied is that there are broad distinctions in the tenures characteristic of these different parts of the province, and typical forms can generally be recognized which were probably once more widely spread than they are at present.

I.—Tenures of the Plains of the Eastern and Central Punjab.

148. The plains of the Eastern and Central Punjab.—The distinguishing mark of the first division is the prevalence of well organized village communities. The general features of these bodies have already been described. They are found in their purest form in the south-east of the province, and here it will generally be found that the proprietary body in each estate or main sub-division of an estate claim to be kinsfolk, and that ancestral shares or some other definite measure of right, such as ploughs, is, or at least in comparatively recent times was, recognized.* In the north-west of this division the communities were often much less homogeneous, and, whatever may have been the original form of land-holding, the rule of our predecessors had created a state of things in which the land in each man's possession had to be recognized as the measure of his liabilities, and also of his right in any common property or profits. *Talukdari* tenures are not common in the districts of the Eastern and Central Punjab. The curious survival of the primitive custom of a periodical redistribution of land in some estates in the Gurgaon district is alluded to in the 158th paragraph.

II.—Tenures of Kangra and Simla.

149. Source of information as to tenures of Kangra and Simla.—When we pass from the plains to the hill country which bounds them on the north a very marked change of tenures is apparent. The best account of the hill tenures is to be found in Sir James Lyall's *Kangra Settlement Report*, of which very free use has been made in the following paragraphs.

150. Absence of real village communities.—In the hills no village communities in the proper sense exist. Historical causes can be

*This does not apply to the Hissar district, a great part of which was within comparatively recent times a wild tract occupied by a sparse and shifting population of graziers and shepherds.

plausibly assigned for this peculiarity, but in any case the physical nature of the country by itself would have prevented the growth of compact groups, each holding a well defined area of arable and pasture land.* The villages recognized in our records are artificial collocations of hamlets or holdings corresponding with the *tappas* or circuits which the hill Rajas formed for the sake of fiscal convenience and each of which they put in charge of a single manager. The individuals in possession of these grouped holdings are united by no real or pretended bond of relationship.

151. The Raja also the landlord.—“Each Raja was the landlord of the whole of his *raj* or principality, not merely in the degree in which everywhere in India the State is in one sense the landlord, but in a clearer and stronger degree..... Each principality was a single estate divided for management into a certain number of circuits. The waste lands, great and small, were the Raja's waste, the arable lands were made up of the separate holdings of his tenants.”†

152. Titles derived from deeds of grant given by the Raja. Every holder of land derived his title from a *patta* or deed of grant given to himself or his ancestor by the Raja which assigned to him “certain specified fields or culturable plots..... He called his right a *warisi* or inheritance, not a *maliki* or lordship.”‡ The *waris* had a permanent title in his holding. In the state of society which existed when our hill tracts were still ruled by Rajput, chiefs legal rights do not exist, but popular feeling distinguishes clearly between what a ruler ought and what he ought not to do. “A good Raja never evicted an old cultivator without a very strong cause..... but there was no protection against a bad Raja for a cultivator of humble position, though a strong family of good caste or social standing had little to fear..... The rent due from the holder of each field was payable direct to the Raja.....”

The agents who collected these dues and rents from the *wazir* down to the village headman were the Raja's servants appointed and paid directly by himself.”§

153. Rights of user in the waste.—As regards the waste the landholders had merely rights of user which were not measured by the amount of land in their possession and were in fact shared by residents in the same *tappa* who had no land at all. Grazing fees were exacted from all alike. The cattle were not confined within the limits of the particular *tappa* in which their owner lived. The rights of the landholder were not allowed to interfere with the power of the Raja to make allotments to new cultivators out of the waste, and there was no real difference between the title of the oldest and that of the latest grantee. There were often indeed certain hayfields near the cultivated holdings which landholders enclosed during

*Kangra Settlement Report, paragraph 26.

†Kangra Settlement Report, paragraph 25.

‡Kangra Settlement Report, paragraph 20. It seems doubtful whether the use of the term *warisi* rather than *maliki* has the significance here ascribed to it. *Warisi* is used to denote proprietary right in parts of the country where these hill tenures do not prevail (see e.g., Captain Mackenzie's Settlement Report of Gujrat, paragraphs 169, 170 and Brandreth's Settlement Report of Jhelum, paragraph 259).

§Kangra Settlement Report, paragraphs 20 and 25.

parts of the year, and a grant of land to an outsider from these would have been looked upon as an act of tyranny on the part of the Raja. Exclusive rights of user were granted to shepherds in particular runs during a portion of each year, and these men were often not even subjects of the Raja, but merely drove their flocks into his territory for convenience of pasturage at particular seasons. Portions of the waste were also set apart as shooting preserves for the Raja.

154. Effect on tenures of the first regular settlement.—The Sikhs drove the hill Rajas of Kangra into exile or degraded them into mere *jagirdars*, and the British Government, when it took over the country, did not restore them to their old position. The first regular settlement was made in 1850-52, and its effect on tenures is a curious example of the extent to which officials in defining tenures are apt to mould them after some familiar model. The Settlement Officer had a competent knowledge of the facts with which he was dealing, but the only settlements with which he was acquainted were village settlements, and his native staff knew the procedure of the United Provinces and nothing else. "If Mr. Barnes had adapted his settlement forms and proceedings to the system of assessment and form of tenure which he found existing in Kangra, he would have made a kind of *raiya'wari* settlement with each family for its holding of cultivated land and patches of appropriated waste, leaving all the unenclosed waste.....the property of the State subject to the rights of common belonging by custom to the landholders and others..... What he did was to apply to the hill circuit, with slight alteration, the terms and forms which are in use for an estate.....of the kind known.....as a *bhaiachara mahal*."* In Kangra proper the waste of each village had definite boundaries assigned to it and became the *shamilat deh*, though the rights of Government in valuable trees were reserved. Some miscellaneous items of rent or revenue, and notably the rent of new cultivation in the waste which properly belonged to the State, were made over to the new communities, and the principle of joint responsibility for the Government demand was introduced. Experience has shown that anything like a real village assessment is in a large part of Kangra impossible. Each holding has to be dealt with separately and the principle of joint responsibility would break down if it were translated into practice. In Kulu, whether by accident or design, the rights of the State in the waste have been more fully preserved.

155. Talukdari rights in Kangra.—In some cases *jagirdars* in Kangra who are representatives of old ruling families enjoy *talukdari* rights. These as regards cultivated holdings have been commuted into a percentage of the land revenue, but the rights enjoyed over the waste are sometimes very considerable.†

III.—Pathan Tenures.

156. Source of information as to Pathan tenures.—The settlements of the Pathan tribes in the country to the east of the Suleiman Hills

*Kangra Settlement Report, paragraph 27.

†Compare with the above the account of the tenures of the Simla district in Colonel Wace's Settlement Report. An account of the curious Mongolian tenures in Spiti will be found in paragraph 12 of Mr. Diack's Settlement Report of Kulu.

began perhaps 1,200 years ago and have continued down to our own time. The following account of Pathan tenures is largely drawn from Captain Hastings' Settlement Report of Peshawar. But forms of landholding of the same general type in different stages of development are common in the other districts occupied by Pathan tribes.

157. Partition of a newly occupied tract.—When a tract was occupied by an invading tribe a partition took place. The lot of each main sub-division of a tribe was sometimes called a *tappi* and described as its *daftar*, the individual proprietors being known as *daftaris*. Where circumstances required it, the lot was divided into *vands* according to the nature of the soil, facilities for irrigation, &c., and the number of *bakhras* or shares, which was to be the basis of division was calculated, one being often allotted to each man, woman and child. Each share properly included an allotment from each *vand* or at least from each kind of land so that a man's possessions might be a good deal scattered.* But the whole or the main portion of the property of a sub-section (*khel*) of a tribe usually consisted of a single block of land, in the middle of which it built a village called after its name. The block was divided into *vands*, so that all might share alike. The *maliks* or leading men, and even the *khan* or chief, got no more than any one else in the division, but the latter sometimes received certain lands, as *seri* or a free gift from the tribe.

158. Vesh or periodical re-distribution.—To secure a continuance of the original equality of conditions, it was customary to make a *vesh* or re-distribution of the land by lot at fixed intervals, if a majority of the community so desired. It is said that in Peshawar the custom originally extended to an exchange of *tappas*, but in this form it has been very long dead. Inside *tappas* it lasted, however, down to a recent period, and involved the transfer of whole villages, including the inhabited site, and not only the exchange inside villages of the *kardis* or sub-divisions, or of individual holdings. *Vesh* is destined to disappear, but it was still enforced in one form or another in some Pathan tracts in the frontier districts when they were first settled.† In carrying it out the recognized shares were in some places those adopted in the original partition, in others every male, old and young, got an equal portion.‡ In Marwat a fresh calculation of shares took place, one being allotted to each man, woman and child. This was known as *khula* or mouth *vesh*.§ We became acquainted with Pathan tenures at a stage of their development when "shifting severalty" still prevailed. But every one with even a slight knowledge of the history of Indian and European forms of landholding knows that a periodical re-distribution of land is a common incident of primitive tenures. It still exists under the name of *panapalat* in some of the villages of the

* Tucker's Settlement Report of Dera Ismail Khan, paragraph 320.

† In Peshawar *vesh* now appears to be extinct, but in his Settlement Report Sir Louis Dane notes that "a periodical distribution or *vesh* of the areas and even of the houses held by each clan over the existing adult males still prevails in Buner where the last *vesh* was made in 1891 (Dane's Settlement Report of Peshawar, paragraph 20).

‡ Tucker's Settlement Report of Dera Ismail Khan, paragraph 267.

§ Thorburn's Settlement Report of Bannu, paragraph 136.

Gurgaon district.* The true *panapalat* or the exchange of whole *panas* or sub-divisions of estates is confined to some villages in the Rewari tahsil. But the custom of periodical re-distribution of wells is also found in the district. It would be a mistake to suppose that a careful partition of the kind described above invariably took place among Pathans. In a rough country where the land was of little value each family was allowed to appropriate all it could manage.†

159. Dependents of Pathan tribes.—A Pathan village did not consist wholly of proprietors. There were dependent cultivators known as *fakirs*, and also village servants and artizans. Both classes held land free of charge in return for service in peace and war to the *daftris*. Hamlets (*bandas*) were established on the outskirts of the *tappas*, and occupied largely by *malatars* (loin-girders) or *hamsayas* who held land on condition of repelling raids on the territory of the tribe under whose shade (*sayi*) they sat, and assisting in making raids on its rivals, but were free from any obligation to render the ordinary village service exacted from *fakirs*, menials and artizans.

160. Shares in land and shares in water.—The original division by shares tended in course of time to break down, especially as regards un-irrigated lands. It is natural that each man should strive to keep the fields he has himself reclaimed from the waste, and once he has become responsible for the revenue assessed upon them, the old exact partition by shares is at an end. It is more fully preserved in the case of lands irrigated from springs and canal cuts, and the water itself is usually carefully divided in accordance with ancestral, or at least ancient, shares. In an arid tract rights in water are more valued than rights in the soil. Where cultivation depended on irrigation the partition of the country between the main sub-divisions of a tribe might be made by the method already described, while the further division among sub-sections might depend on the amount of canal excavation performed.‡ Where the supply is abundant the pressure of the demands of native Governments has sometimes led to a levelling up as regards rights in water, the tribesmen and their dependants giving labour and taking water on equal terms; where it is scanty, the old proprietary shares were more tenaciously upheld, and the soil and the water are distinct properties, which are bought and sold separately.§

161. Daftris' inams.—The Governments which preceded our own often gave the whole body of the *daftris* or the *maliks* a considerable share of the ruler's portion, or the lands near the village site, which probably represented the original holdings of the *daftris*, were exempted altogether (*inam barvajah daftariat*).||

162. Encroachment on rights by the khans.—His personal energy and prowess, the favour of the ruler or the official position he had acquired as

*Canning's Settlement Report of Gurgaon, paragraph 117. Compare the account of the *raest-buti* system of tenure in a few of the riverain estates of Sialkot, in paragraph 133 of Captain Dunlop Smith's Settlement Report of that district.

†Tucker's Settlement Report of Kohat, paragraph 189; Thorburn's Settlement Report of Bannu, paragraph 144.

‡Thorburn's Settlement Report of Bannu, paragraph 128.

§ Ditto ditto, paragraphs 102, 105.

|| Hastings' Settlement Report of Peshawar, paragraphs 384 and 388.

a revenue farmer or *jagirdar*, often enabled a *khan* to assert large rights in the unoccupied waste included within the bounds of a sub-section of a tribe, and enjoyed for common purposes of pasturage, &c. In some cases the primitive tribal division was entirely overborne by the power of the *khan*, the latter becoming virtually owner of the whole of the land. He would have been condemned by the voice of the countryside had he turned out a tribesman from the land he actually held or debarred him from grazing cattle in the waste, so long as he bore arms in war, paid the customary cesses, and rendered the customary services. But all the fields which he could not cultivate were at the *khan's* disposal, as was the land of tribesmen who left the country or died childless, and he could grant it on allotments out of the waste as *seri* to men who helped him with their swords or their prayers. These gifts were irrevocable so long as the service was duly rendered, but there were other grants, especially to cadets of his own family, which were held during the *khan's* pleasure.* The similarity of the tenures thus developed to the hill tenures described in paragraphs 150—155 is striking.

163. Tenures in independent territory to the north of the Peshawar district.—It is interesting to compare the above with an account of the tenures in Dir, Swat, Bajaur and Utman Khel written by Sir A. H. McMahon, in 1901 :—

“Owing to their greater isolation the people of this country have maintained the primitive form of their land tenure in its original simplicity. Here also the portion of each main sub-division of a tribe is called a *tappa* and described as its *daftar*. Each *tappa* is sub-divided by division (*resh*) between the sub-sections (*khel*) of the sub-division, and then again in each *khel* into shares for each individual. A man possessing any share, however small, of the land composing a *daftar* is called a *daftri*. Such is the importance attached to the status of *daftri* that a man who ceases to be a *daftri* is no longer entitled to the name *Pathan*, and becomes a *fakir* with no voice in village or tribal councils.”

“Individual shares *bakhra* or *brakha* are calculated in multiples and fractions of some recognized unit of measurement, known diversely in each locality as *pucha*, *nimkai*, *tirao*, *pao*, *rupiya*, *paisa*, *tura*, or *ghwaye*. Lands of various kinds are here also distinguished one from the other as *vands* bearing different names, and a *daftri's* individual share of land may include bits in several *vands*. Portions of land in the share of land belonging to a sub-section or village are sometimes excluded from further sub-division and allotted to *Khans* and sometimes to members of the religious fraternity, such as *Mullahs*, *Saiyyids*, *Mians*, *Akhundzadas* and *Sahibzadas*. These lands are called *seri*. “Those given to the priestly class are generally lands on the border between two villages, disputed lands, and lands which for some reason or other are difficult to hold by other than those whose religious status enables them to hold them in peace and at the same time form useful buffers for the rest of the community. I might mention here that the inheritance of shares of *daftar* follow as a rule the system of *chundavand*, and very seldom that of *pagvand*.”

*Wace's Report on Settlement of the Agror Valley. Compare Captain Leigh's Settlement Report of the Barak Tappa in the Kohat district.

"The system of periodical redistribution of lands in these countries is (except in Sam Ranizai as hereafter described) universal. Redistribution takes place at fixed intervals which vary in each locality from 5 to 10, 15 and 20 years. This redistribution called in some localities *khasanve*, in others *vesh*, extends to the exchange of whole *tappas* as well as to the redistribution of the general shares of *daftaris*. The redistribution of *tappas*, is, as might be imagined, the source of serious dispute. Heavy fighting is at the present moment (February 1901) taking place over the *khasanve* of the *tappas* of sub-divisions of the Bahozi tribe in Upper Swat, the object of which, after a long period of 25 years without redistribution, is to give the other sub-divisions of the tribe a turn in the possession of Mingaora, not only one of the strongest and most important villages in Upper Swat, but a place whose position on the main trade routes gives it a heavy income from tolls. *Seri* lands are excluded from redistribution of other lands within a *tappa*. The system of fresh calculation of shares at time of *vesh* called *khula vesh* is not followed in Dir, Swat, or Bajaur. As far as we know lands have always since the occupation of this country by Pathans been carefully divided and never appropriated by families indiscriminately."

"The description given in paragraph 159 of a Pathan village in former times applies *verbatim* to present conditions obtaining in most villages of this country. With however the increase of peace and order in this country, especially Lower Swat, the need for armed retainers, *malatars*, is decreasing. In some cases *bandas* which in the past were wholly occupied by *malatars*, have been reappropriated by the landlords. Sam Ranizai, which up to some years ago was the property of the Ghar Ranizai of the Swat valley, was largely occupied by *bandas* of *malatars* and cultivating tenants. These suddenly announced their independence and succeeded moreover in maintaining it until our occupation of the country, whereupon it has become permanent. In this tract only is the system of periodical redistribution of lands non-existent."

"There are up to the present no signs of any breaking up in this country of the original division of shares in lands whether irrigated or unirrigated. Owing to the pernicious system of redistribution of lands no change has occurred in their original condition. Lands which might without difficulty be irrigated by new water channels remain unirrigated, for what Pathan will do a stroke of work for the benefit of his successor? Why should he make water channels? Why should he plant trees or make orchards for some one else to enjoy at the next *vesh*? The lands remaining the same, the old division of shares remains the same."

The only lands which show signs of improvement, and on which more than ordinary care is devoted are *seri* lands not liable to redistribution."

"A portion of the village or tribal lands is often set apart for the enjoyment of the village or tribal *jirga* who manage all matters connected with the community. These lands are treated as *seri* lands. On the supersession, periodically of the *jirga* in office by the *jirga* of the faction in opposition these lands change hands."

In Dir and Bajaur where individual chiefs, such as Umra Khan, the Nawab of Dir, and the Khan of Nawagai, have gained greater power, certain lands have at times been handed over by them in free gift for services rendered. Such gifts have not however interfered with the interior distribution of the shares composing the *daftar* or *daftars* concerned, but it has of course led in some cases to the absorption by the Khan of *seri* lands, etc., as opportunities offered."

164. Pathan tenures pass into ordinary village and talukdari tenures.—It is easy to see how tenures of the kind described above might pass in a period of enforced peace into forms of property not widely different from the ordinary village community and *talukdari* tenures, and that this process might be hastened by the tendency of officials to mould tenures into shares with which they are already familiar. As a matter of fact the development of rights in land on the North-West Frontier has been to a considerable extent on these lines.

IV.—Tenures of South-Western Punjab.

165. True village communities rare in S.-W. Punjab.—The rarity of true village communities, which we have noted as a feature of the land tenures of the hills, is reproduced under entirely different physical conditions in the arid plains of the South-Western Punjab. Here the climate by itself is enough to account for the prevalence of holdings in severalty. The rainfall is extremely scanty, and outside the river valleys the country was once, and to a considerable extent still is, a grazing ground for sheep and a browsing ground for goats and camels. These animals have to wander over wide tracts in search of food. Some limits were no doubt recognized within which the cattle of this or that clan grazed, but it would not have profited smaller groups to appropriate or have assigned to them allotments of waste on consideration of being excluded from the remainder. Hence one of the most essential features of the village tenure, the common waste, could not exist. The nature of the cultivation also opposed insurmountable obstacles to the growth of a village system. Tillage is very largely dependent on the provision of artificial means of irrigation, and true *barani* cultivation is practically unknown. In the uplands the scattered wells are deep and costly. Even in the wide river valleys wells are required to supplement the flood water which is led on to the lands through artificial channels. The unit of property is the well, or, in the lands adjacent to hill torrents, the large embanked field or *band*. The well holding is known as "*chah*" or "*patti*," and even where no well actually exists the holding is often assumed to be a well estate, and is called a "*banjari* well" or a "*patti*". How purely artificial the "estate" is in Dera Ghazi Khan may be judged by the following extract from Mr. Diack's Gazetteer of that district:—

"The village is a fortuitous aggregation of independent units. The units in the Sind tract are wells, *i.e.*, the well and the land irrigated by it; or even, not unfrequently, a compact holding, though no well may exist in it; in the Pachadh the unit is the area included within one irrigation embankment, and hence known as a *band* or embankment. Several of these wells or embankments as the case may be, are collectively called a village, and are looked upon from an administrative point of view as forming one community; but they are not, properly speaking,

sub-divisions of a village, but a series of proprietary units not really in any way knit together but thrown into association either by the necessity for mutual protection, or, still more often, by the accident of having been included for administrative purposes within a common village boundary, and now maintaining that association simply as the result of the revenue system of the country.

In the Pachadh wide tracts belong to the members of the same tribe, but even here the lands of each village are said to have been parcelled out to the members of the tribe by the *tumandar* when the tribe first settled in the plains; and each member of the tribe has held his land ever since in complete independence. This view of the formation of villages in the district is amply borne out by the absence of village common, even in Pachadh villages held by families belonging to one tribe. In the Punjab proper, it is most exceptional to find a village in which some land, or some right connected with a portion of land, does not constitute a property common to the whole body of village sharers. Here there is no trace of any such relic of ancient community of property to be found from end to end of the district.”*

166. Attempt to introduce the village tenure in Multan.—At the first settlement of Multan communal tenures were introduced, though the Commissioner, Colonel Hamilton, urged that they were quite unsuitable. A considerable part of the waste was treated as Government property, but with this exception, the whole country was divided into villages or *mauzas* which were generally of a very artificial character. In some parts, however, not a few estates are to be found in which the landowners are all, or nearly all of one stock, and in such cases a communal tenure is not markedly unsuitable, though the cohesion between the shareholders is much weaker than in the Eastern or Central Punjab. But generally the village system was forcibly engrafted on a form of property with which it was incompatible. An estate was often a mere group of scattered wells with the addition of a large block of the surrounding waste, which was declared to be the common property of the well-owners. The assumption of joint responsibility was absurd as regards estates consisting of collocations of upland wells, and both in assessing and collecting the revenue has practically been abandoned. Even in the riverain tracts it was unworkable owing to the shifting character of the floods, but here it disappeared with the introduction of the fluctuating system of assessment.

167. Division of proprietary right between two classes. Superior proprietors or zamindars.—A widespread, though far less universal, feature of land-holding in the South-Western Punjab is the recognition of two distinct classes having separate proprietary interests in the soil. The existence of certain dominant families and clans enjoying an admitted social superiority over the larger body of men of very miscellaneous castes, who cultivate the greater part of the land, is noticeable. The overlordship of the soil, which, whatever its actual origin in each case, was the adjunct of this social rank, was here less completely overborne by the levelling effects of Sikh rule than in Jhelum or Rawalpindi (see paragraph 174), and was in

*Dera Ghazi Khan Gazetteer, pages 76-77.

some cases recognized in our early settlements, and in others survived without distinct recognition. An excellent account of the tenure referred to above was given by Mr. O'Brien in the sixth chapter of his Settlement Report of Muzaffargarh.

"At the head of the agricultural system is a large body of what are now called superior proprietors. Most of these are descendants of tribes who came here for grazing at a time when the country was depopulated. With or without the leave of the Government of the time being, they occupied tracts, the boundaries of which were not very clearly defined. Other superior proprietors are the descendants of *jagirdars* and former governors or officials who lost their position in troubled times, but were able to retain a right to a small grain fee in the tract over which they once exercised power. Others are the descendants of holy men who formerly held land free of revenue, but whose rights have been circumscribed by successive Governments. The superior proprietors above described were from the first in the habit of introducing settlers to till the lands, but the great development of the settler class was due to Diwan Sawan Mal. When he took the farm of the revenues of this district from Ranjit Singh, he saw at once that cultivation could not be restored or increased by the representatives of former governors, holy men, broken down *jagirdars*, and loosely connected tribes, whom he found in nominal possession of the lands. He, therefore, encouraged strangers and Hindu capitalists to sink wells, dig canals, and cultivate the lands of the nominal owners. At the same time he secured to the latter a share of the produce, generally half a *ser* in each *maund* by weight, or one *pai* in each *path* ($\frac{1}{16}$ th) where the crops were divided by measure. In some cases the old proprietors were strong enough to levy an institution fee, when a settler was located on their lands. In this way two distinct classes of proprietors were formed :—

- (1) The old possessors who were known as *zamindars* and *makaddims*, and in modern official language *malikan 'ala* and *tahukdars*.
- (2) The settlers, formerly called *riaya* and *chakdars*, and now generally *malikan adnan*. The *chakdar* was so called from the wooden frame on which the masonry cylinder of a well is built. The name was meant to express that the *chakdar* had acquired his rights in the land by his having sunk the well. For this reason he was also called the *silhdar* or owner of the bricks of the well."*

The superior proprietary right had sometimes a different origin from that described above. Writing of Multan Mr. MacLagan remarked—

"We have seen how outsiders were introduced, either by the *zamindar* himself or by the State, and how they had to pay *hakk zamindari*. But it often happened when the *zamindari* family was numerous, and their land limited, that no outsiders were introduced. The various members of the family divided the lands amongst themselves, or, as was more commonly the case, each man brought what he could under cultivation without regard

*Muzaffargarh Settlement Report, Chapter VI, paragraph 17. The derivation given to the word *chakdar* seems to be incorrect (see paragraph 168). As to *silhdar* compare page 79 of the Dera Ghazi Khan Gazetteer.

to any regular shares. Each became full proprietor of his own holding, but he had to pay half a *ser* in the *maund* as *hakk zamindari* or *mukaddimi* to the head of the family. Sometimes, however, where the head was weak, or there was a dispute, the due was not levied. There can be little doubt that the *zamindari* and *mukaddimi* are one and the same due, that the original form was the *mukaddimi*, and that this was somewhat the same as our *lambardar's* fee. Indeed, this is admitted by most men who are not directly interested in maintaining the contrary. This due would originally be collected by the headman from all the proprietors, but when the number of outsiders became sufficiently great to give the headman a fair income from them alone, he would cease to collect from the proprietors of his own tribe. He would also do so when he was weak and required their support, for instance, when a young man wished to succeed his father to the exclusion of a richer or more powerful uncle, and in extreme cases he would promise not only to exempt his kinsmen, but even to divide amongst them the due collected from others. When this last practice has become firmly established, the due has ceased to be a *mukaddimi* or headman's fee; it has become the property of a whole family or *zamindari hakk*, and the family speak of themselves as *amindars* or *'ala maliks* in distinction to the settlers of other tribes, who are *adna maliks* or *chakdars*.”*

168. Inferior proprietors or chakdars.—The best account of the *chakdar* or inferior proprietor of the South-Western Punjab is to be found in the Multan Gazetteer (pages 170-171)—

“The settlers introduced by the State, or by the *zamindar* himself, into a *zamindar's* village, are known as *chakdars*. The name is also applied to those proprietors of the *zamindar's* tribe who have continued to pay the *hakk zamindari* or *mukaddimi* to their chief or chief's family, and it is sometimes even extended to settlers who have sunk wells under direct permission of the State in tracts where there has never been any one to claim a *zamindari* due. Thus when Diwan Sawan Mal made his new canal, the Diwanwah, through the Mailsi *bar*, he gave direct grants to settlers, proclaiming at the same time that if any one could establish a claim to *zamindari* it should be allowed; no such claim was established, but still the settlers were generally described as *chakdars*. The supposed connection of the name with the wood-work of the well† and the payment of the *zamindari* gave rise to the idea that the *chakdar* owned the well only; in fact that he was a capitalist who had sunk a well for the *zamindar* who remained the true owner of the soil, and could buy out the *chakdar* on repaying him the money expended. This idea was still further encouraged by the fact that the *chakdar* sometimes did not cultivate himself, but let his well to tenants, and it occasionally happened that the tenant was one of the old *zamindars*. There was consequently rather a tendency at the commencement of our summary settlements to regard the *chakdar* as an interloper who, by the power of money, was ousting the old family from its original rights. But this was quite a mistake: the *chakdar* whether he got his title from the *zamindar* direct or through the State, always held his land in full proprietary right, subject only to the payment of a quit

*Multan Gazetteer, pages 168-169.

†Mr. MacLagan points out that the wood-work of the well in Multan is never known as *chak*, which is the term applied to the plot of land round the well.

rent in the shape of the *hakk zamindari*. Of course if he abandoned his land it reverted to the *zamindar*, but this was because the latter was the owner of all the waste land and not in virtue of any contract entered into at the time of purchase. On the other hand any right of cultivation enjoyed by the *zamindar* was acquired by a distinct contract between him as tenant on the one side and the *chakdar* as proprietor on the other; the terms of the contract might vary from that of a tenancy-at-will on a full rent to that of a permanent occupancy on a quit rent, but the original rights of the *zamindar* in no way influenced his position as tenant."

When the *chakdar* was an outsider introduced by the *zamindar* he paid the latter an installation fee known as *jhuri*, *lungi*, *pagg* or *siropa*.

169. Rights of superior owners and of chakdars.—The position of the two classes in Muzaffargarh was explained by Mr. O'Brien as follows:—

"The superior proprietors claim to be owners of all unappropriated land. The *malikan adna* are full proprietors of the land in their possession subject to the payment of the share of the old proprietors, and not liable to eviction on failure to pay it, and are entitled to introduce tenants without reference to the superior proprietors. The superior proprietors, as such, have no right to interfere in the management or the cultivation of the appropriated lands of a village. The settlement has in no case been made with them, except where they are also inferior proprietors. Their rights are restricted to receiving their fee in grain or cash, and to disposing of the unappropriated waste in the village.* * * * * The fee is known as *hakk zamindari*, *hakk mukaddimi*, and *malikana*, or more often the specific rate at which the share is fixed, e.g., *adh sera man* and *pai path* are used instead of the generic word. In Sananwan it is called *satan pawan*, or the seven-quarters of a rupee which equal Re. 1-12-0, the percentage on the land revenue at which it is paid * * * * * The inferior proprietors in a village have usually no common ties of clanship. They are a miscellaneous body, each member of which was originally introduced either by the Government or by the superior proprietors. In villages where superior proprietary right exists, the inferior proprietor is usually entitled only to the land occupied by himself or his tenants. The unappropriated waste belongs to the superior proprietors.* The inferior can graze his cattle in it subject to the *tirni* rules, but cannot cultivate it without leave of the superior. In other respects the tenure of inferior and absolute proprietors differs only in that, as regards the latter, the superior right has ceased to exist. If an inferior proprietor cultivate through tenants, he receives a grain fee which is called *lichh* on the Indus and *kasur* on the Chenab. The rate varies with locality and in consequence of contract, but it is almost invariably one-seventeenth of the gross produce and is known as *soth satari*."†

170. Division of the produce where this form of tenure prevails.—Where this form of tenure prevails the primary division of the produce is into the *mahsul*, which presents the share of the State when revenue was realized in kind, and the balance, sometimes known as the *rahkam*. Under our rule the person who pays the land revenue receives the *mahsul*. Our

*In Multan the right of the *zamindar* over the waste has often been lost, mainly the result of our system of record. (Gazetteer, page 173).

†Muzaffargarh Settlement Report, Chapter VI, paragraphs 17 and 19.

settlements have been made with the inferior proprietor, and he is therefore entitled to it, but private arrangements sometimes transfer liability for the revenue and the right to the *mahsul* to the superior proprietor or to the tenant, or even to some person who has no connection with the land. Out of the *rakkam* has to be paid the *pai path* fee of the superior proprietor, and, where the cultivator is a tenant, also the *lichh* or *kasur* of the *chakdar*—

“ Under native rule the revenue or *mahsul* was taken in kind and as the rate approached in many cases that of a full rent, there remained after deducting the cultivator's and the State share but a small fraction for the non-cultivating proprietors. This fraction was called *kasur* (the plural of *kasur*, and meaning ‘fraction’). When this fraction was small it would be hardly worth the proprietor's while to go perhaps some distance to personally superintend the division of the crops; the rent he received from the cultivator with one hand was immediately almost entirely paid away with the other in the shape of the Government revenue, and he would remain responsible for any balances. Hence the custom would naturally spring up of the *chakdar* allowing his tenant to pay the Government share direct to the Government official, and to give the *chakdar* a fixed allowance in lieu of the actual balance. It is this fixed allowance which is now, and has for some time been, generally known as the *hakk kasur*; and its general rate is two *seers* in the *maund*, or one-twentieth of the gross produce.* The *chakdar* who received this allowance is called the *kasur-khor*, or *kasur-khwar*, the eater of the *kasur*, but the word is often corrupted into *kasur-khwah*. From his *kasur* the *kasur khwar* has to keep in repair the brick-work of the well, and pay the *hakk zamindari* of half a *ser* in the *maund* if there is one. Under the system of fixed cash assessment the permission to engage direct for the Government revenue has grown into a very valuable right; the *chakdar* finds that he cannot recover his former position, and the only right left to him is the nominal ownership of the well, and the right to receive *kasur*. This *chakdar* who has lost his right to engage is now the person generally meant by *kasur khwar*, and this position has frequently been conferred as a compromise on a man who has claimed a well of which he or his ancestor was undoubtedly the original proprietor, but from all possession of which he has long been excluded.* * * * The word *kasur* is, however, still used occasionally in its original sense of the profits of the *chakdar*, who pays the revenue himself, and such a man is occasionally known as *kasur-khwar*.” In Dera Ghazi Khan, where the division of ownership into superior and inferior does not appear to exist, the proprietor takes from the tenant both the *mahsul* and a small fraction of the *rakkam* as *lichh*, but in some places, the double payment has been consolidated into a simple fraction of the gross produce.†

171. Effect of land revenue settlements on tenures of superior proprietors.—The tenure described above was at annexation the

*Multan Gazetteer, pages 171-172. The term *kasur* is also applied to an assignment or part of the ruler's share made to secure the support of an influential man. In this sense it corresponds with *chakaram* in the north of the Punjab (see paragraph 115).

†Dera Ghazi Khan Gazetteer, paragraph 81.

prevailing type of landholding in Muzaffargarh and a large part of Multan and Mianwali. Its subsequent history illustrates the fact that rights of property depend largely for their stability on the extent to which they are recognized at settlement. The title of the superior landlord has been most fully preserved in Mianwali and in the Sanawan *tahsil* of Muzaffargarh. At the summary settlement of the Bhakkar and Leiah *tahsils* of Mianwali and of the Sanawan *tahsil* of Muzaffargarh made in 1854, the proprietors were classified as *zamindars* and *chakdars*. The settlement was made with the latter, but the claim of the former to a share of the produce was recognized, and commuted into a surcharge on the assessment calculated at the percentage of Re. 1, annas 12 on its amount. This may not have been an equivalent to the grain payments hitherto received, but it had at least the effect of establishing the tenure on a firm basis. In the two southern *tahsils* of Muzaffargarh and in Multan on the other hand the superior proprietary right has disappeared altogether in many villages. Superior proprietary rights tend to disappear by being sold to persons who possess the more valuable inferior title.* The tenures in the Trans-Indus *tahsils* of Dera Ismail Khan only took shape in the settlement effected between 1872 and 1879, and it was a peculiarity of the arrangements then made that inferior proprietary right was generally conferred, not only on the sinkers of wells, but also on *lathbands* or embankers of land dependent on hill torrents and on *butemars* or breakers-up of waste in the riverain tract, who in adjoining districts were only held to have acquired a permanent tenant right. Of course a type of land-holding prevailing over so wide an area is subject to many local modifications. To describe these would be outside the scope of this book. A good account of some of them will be found in Part III of Mr. Tucker's Settlement Report of Dera Ismail Khan, and the late Captain Crosthwaite's Daman Assessment Report may also be consulted. In the Sangarh *tahsil* the custom of periodical redistribution of land still exists in a few estates under the name of *vandara*.†

172. Acquisition of proprietary right by farmers.—In the Dera Ismail Khan district farmers appointed by Government and known as *mushakhsadars* were, down to the Regular Settlement of 1872–79, very often responsible for the payment of the revenue of one or more estates, and, in some exceptional cases, their connection with the land was at settlement made permanent and treated as a superior proprietary right. In Muzaffargarh similar arrangements were frequently made by the people themselves, the farmer being known as *mahsul khor* because, on condition of paying the cash assessment, he was entitled to the *mahsul* or ruler's share of the crop. In Jhang and Multan the tenure of the *hathrakhaidar* was in its origin similar, and therefore would naturally have been terminable whenever the land-owner was prepared himself to pay the revenue.

“ Sometimes a community of *zamindars* to obtain a lighter assessment would voluntarily create this right (to take *hakk zamindari*) against themselves in order to put themselves under a man of power and influence. By a fictitious sale they professed to sell him their entire village; he became the nominal proprietor, and by his influence obtained a light assessment; this

*Multan Gazetteer, page 172.

†Dera Ghazi Khan Gazetteer, page 79.

was paid by the villagers, and the new proprietor received from them the usual *hakk zamindari* of half *ser* in the *maund*, but beyond this he had no right in the village.* In Jhang on the other hand the *haihrakhaidar* seems to have taken the *mahsul* for himself and paid the demand of the State, giving a small fee to the land-owner. But his "right to take the proprietor's share of the produce minus a fee varying in amount in recognition of the title of the original proprietor has there crystallized into a permanent transferable and hereditary right." An account of the curious process by which the revenue farmer in Jhang has developed into a right-holder will be found in the 83rd paragraph of Mr. Steedman's Settlement Report. In the same way he has often been converted in Multan into a full proprietor.†

173. Adhlapi and taraddadkar tenures.—The *adhlapi* tenure of the south-western Punjab must be noticed. A man who sinks a well in land which does not belong to him with the owner's permission becomes proprietor of half the land which it commands. He very commonly cultivates or arranges for the cultivation of the whole of the land, takes half of the proprietor's share of the produce, and pays half the land-revenue. Whether he has a right of occupancy in the half of the land which he does not own appears to be doubtful, and it has been held that in cases of dispute, either party may enforce partition.‡ The *adhlapi* tenure is very common in Dera Ghazi Khan, and there a man is sometimes given an eighth share of the proprietary right in a well simply for clearing the *jangal* off the land to be commanded by it.§ The *taraddadkar* in Jhang who had sunk a well acquired by custom a similar title. When the landlord himself sunk the well it was sometimes worth his while to give a man a right to cultivate the land on a hereditary tenure on the condition that he would take half the proprietors' share and pay half the revenue. Such a tenant is also known as *taraddadkar*. Of course the customary incidents of any land tenure can always be defeated by the express provisions of a written contract; and new tenures are in these days generally created by deed.||

V.—Tenures of the North-Western Punjab and Hazara.

174. Tenures of the North-Western Punjab moulded or created by official action.—This tract is bounded on the south by the Salt Range and on the west by the Indus. It includes the districts of Attock, Jhelum, Rawalpindi and Hazara between the Indus and the Jhelum, and the district of Gujrat between the latter river and the Chenab. There are Pathan settlements to the east of the Indus. In some of these traces of characteristic Pathan tenures remained at annexation, and even now they have not disappeared everywhere.¶ In no part of the Punjab was the influence of our

*Multan Gazetteer, pages 171-172.

†Multan Gazetteer, page 172.

‡See Settlement Commissioner's (Mr. Lyall's) Review of the Lodhran Assessment Report, paragraph 2, and Judgment No. 110 of 1885 (Civil) reported in the Punjab Record of December 1885.

§Dera Ghazi Khan Gazetteer, page 79.

||Steedman's Settlement Report of Jhang, paragraph 84.

¶For *vesh* see paragraph 361 of Cracroft's Settlement Report of Rawalpindi and page 151 of Wace's Settlement Report of Hazara. For other Pathan tenures see paragraphs 4 and 69 of Chapter V of the latter report.

first Settlement. Officers in moulding and even creating land tenures more strongly marked.* This was a necessary result of the effect of Sikh rule in obliterating old rights and reducing all persons dependent on the land to one common level. The process had gone much further in Gujrat, Rawalpindi and Hazara than in the wilder tract along the Indus now forming part of the Attock district.† The juxtaposition of dominant families and clans and of a miscellaneous collection of inferior tribes is a feature of the north-west as of the south-west of the Punjab. The heads of some of the fighting clans, such as the Gakhars, ruled wide tracts under the nominal suzerainty of the Delhi Emperors. But wherever the arm of the Sikh ruler could reach the great families and clans fared badly. In Attock they retained in a large measure their old power and influence, and the leading men among them had up to annexation to be conciliated by the grant of liberal *chaharams*,‡ some of which survive to this day.§ The settlements of Jhelum and Rawalpindi were not completed till after the Mutiny, and there was a disposition, stronger towards their close than at their beginning, to concede something to the descendants of men, who had been stripped of their influence by the Sikhs, while at the same time maintaining the actual cultivators of the soil in most of the privileges which they had acquired.||

175. Forms of ownership recognized.—Our officers had in fact to seek for a fair compromise of conflicting claims. In Gujrat, which was the first of the districts to be settled, and where the Sikh mill had ground exceeding small, the old owners, known as *warisan* do not seem to have pressed their claims very hotly.¶ But in Jhelum and Rawalpindi, which then included tahsils now in Attock, the former lords of the soil vehemently contested the proprietary right with the cultivating communities. The original villages of the leading clans often covered very large areas, and cultivators had been located in outlying *dhoks*, or hamlets, whose occupants now claimed to be treated as entirely independent communities. Tenants in the parent villages alleged that they also possessed full rights as owners on the ground that the old land-holders had received from them no sort of recognition of proprietorship. A similar state of things existed in Hazara, where the settlement did not begin till 1868. Four classes of owners emerged—

- (a) *talukdars* or '*ala malikan*,
- (b) *malikan* or *warisan*,
- (c) *adna malikan*, and
- (d) *malikan kabza*.

*Captain Hector Mackenzie's Settlement Report of Gujrat, paragraphs 166—177 and 194—197.

Cracroft's Settlement Report of Rawalpindi, Chapter III.

Brandreth's Settlement Report of Jhelum, Section IV.

Wace's Settlement Report of Hazara, Chapter V.

†Captain Hector Mackenzie's Settlement Report of Gujrat, paragraph 169.

Cracroft's Settlement Report of Rawalpindi, paragraphs 279-280.

Wace's Settlement Report of Hazara, page 6.

‡Cracroft's Settlement Report of Rawalpindi, paragraphs 279-280.

§The Khan of Makhad in Attock receives one-fourth of the revenue of the estates owned by Pathans of his clan, and the Maliks of Pindigheb in the same district get an allowance equal to one-quarter of the revenue of 26 villages, and made up in some cases of an assignment of 15 per cent. paid by Government and 10 per cent. as a *taluqdari* allowance paid by the landowners, and in others of 10 per cent. paid by Government and 15 per cent. by the proprietors.

||Brandreth's Settlement Report of Jhelum, paragraphs 98 and 256—265.

¶Cracroft's Settlement Report of Rawalpindi, paragraph 301.

¶¶Captain Hector Mackenzie's Settlement Report of Gujrat, paragraph 170.

The nature of the tenure of owners of the last class has been described in paragraph 142. It was introduced into the settlement of the North-Western districts of the Punjab under the orders of Mr. Thornton, the Commissioner of Rawalpindi.* It has been remarked that he invented the name, but not the thing. At any rate the solution of the ownership problem which he proposed was not unfair, and where it was adopted, the form of landholding produced was not unlike that which had grown up spontaneously in some of the South-Western districts. Of course new tenures of *malikan kabza* are created whenever land is sold without its appurtenant share in the common waste.

176. Tenures of Gujrat and Rawalpindi.—In Gujrat the original landowners were generally recognised as full proprietors, but a considerable body of *malikan kabza* was also created, who paid nothing but the revenue assessed on their holdings, but had no share in the village waste. Very few claims to *talukdari* rights were made or admitted, and the percentages on the land revenue allowed were small, and never apparently exceeded 10 per cent.† In Rawalpindi full proprietary right was conceded to most of the persons found in possession of the soil. In the plain villages Sikh rule had stripped the old fighting clans of almost every shred of superiority, and the landowning body as a whole and generally also within each estate is of a very heterogeneous character, and the communal bond hardly exists. Many persons were also recorded as *malikan kabza*, but some of them were not full owners even of their own holdings, but paid a proprietary fee over and above the land revenue.‡ Where *talukdari* rights were admitted, the *talukdars* were given no rights in the common lands. In the Murree and Kahuta hills the tenures described in paragraphs 150—153, if they ever existed, had disappeared long before British rule began. Here the Sikhs did not break up the old clan organization, and the country is still parcelled out among different tribes.

177. Tenures of Attock.—This is also a feature of the land tenures of the Attock district. Some of the leading families there were able to maintain so strong a position that we still find large properties consisting of several or even many villages owned by a single person or by a small group of near relations. Some of the *talukdars* not only receive allowances from the inferior owners, but also own the waste. We have the same curious combination as in Rawalpindi of *malikan kabza* pure and simple and persons paying proprietary dues to full owners, but themselves possessing no rights in the village common. A few instances occur of inferior owners paying a share of the crop to the superior owners, just as if they were tenants. The peculiar *mukarrari-dari* tenure of Attock will be more properly described in the next chapter. The above remarks apply to the three tahsils of Attock formerly belonging to Rawalpindi. In the fourth, Talagang, which was transferred from Jhelum, there are a few superior owners receiving *talukdari* dues, but having no share in the waste. But in a good many other estates the representatives of the original *malikan kabza* created at the first Regular Settlement of Jhelum are

*Cracroft's Settlement Report of Rawalpindi, paragraph 300.

†Captain Hector Mackenzie's Settlement Report of Gujrat, paragraph 177.

‡Cracroft's Settlement Report of Rawalpindi, paragraph 300, also table on pages 130-131.

also inferior owners, for, besides having no share in the waste, they pay *malikana* to the rest of the proprietors.

178. Tenures of Jhelum.—This combination of inferior ownership with the *malik kabza* tenure is in fact a characteristic feature of all original tenures of the latter class throughout the old Jhelum district. But there is a curious variation in some estates, "the proprietors being divided into three classes—

- (1) '*asl malikan* or '*asl warisan* ;
- (2) *warisan kabza* ;
- (3) *malikan kabza*.

* * * * In general the third class has as usual no share in the *shamilat*; the second takes a share therein calculated on its own holdings only ; and the first takes a share calculated on the holdings of the *malikan kabza* as well as on its own."

Talukdars with no share in the waste, and merely having a right to receive a percentage on the land revenue as an acknowledgment of ancient claims, are found in some seventy villages.*

178-A. Tenures of Hazara.—The dominant tribes of the Hazara district won their possessions (*wirasat*) by the sword in the century and a half which preceded British rule. The Gakhars of the Khanpur tract form an exception. "The *waris* was the last conqueror." The conquering tribe might leave or locate bodies of cultivators on border lands, from whom little was exacted but feudal aid in war as *lakhans* or loin-girders. Or it might hold the fat lands in the plains, and let the older inhabitants keep the hill lands on payment of light rents supplemented by personal services. The conquerors had in the end to yield to the Sikhs. Some fled the country, but most submitted. The Sikhs as usual treated the *waris* and the cultivator alike, making exceptions in the cases of some powerful men and families whom it was worth while to conciliate. They introduced a further element of confusion by giving leases of villages in a number of cases to revenue farmers, who had no hereditary connection with the soil, and some of these survived down to the Regular Settlement made in 1868—1874. When British rule began the usual struggle between the old *waris* class and the actual possessors of the soil began and was only concluded twenty-five years later at the Regular Settlement. The Settlement Officer, Captain Wace, described the general result as follows :—"The cases are few in which a member of the old *waris* class has been denied all footing in his old heritage ; on the other hand, short of refusing such men a moderate recovery of their old status, we have maintained in a privileged position as owners or as hereditary tenants, those who obtained possession during Sikh rule, and had continued to hold the land under our rule." The revenue farmer pure and simple was dispossessed. In one case at least where the *jagirdar* had always treated the persons in possession of the soil as tenants and levied grain rents, he was recognised as proprietor, though an exception was made when the occupant was a member of an old *waris* family. The loyalty of the Gakhars was rewarded by the restoration to them of their ownership of the Khanpur tract, which had been in abeyance for 40 years, and most of the cultivators there were recorded as

*See paragraphs 115—117 of Mr. Talbot's Settlement Report of Jhelum.

occupancy tenants. The *malik kabza* tenure was introduced in Hazara, though not on a very large scale, the more usual course being to protect subordinate rights by the grant of hereditary tenancies. There are in a few villages persons holding an intermediate position between full owners and *malikan kabza*. They are known as *malikan ba rasad kabza* or in the Khanpur tract as *guzara-khwars**, and their rights in the waste are the same as those of *warisan kabza* in Jhelum. Of course in the hill villages of Hazara, where the people live in homesteads or little hamlets scattered over a large area, the communal bond is very weak.†

179. Policy adopted as to the assessment of jagir estates and other revenue-free holdings.—Under native rule, where rent and revenue are almost synonymous terms, a revenue assignment conveyed to the grantee the right to take from the cultivators all that a landowner would now realize. The principle was gradually established that the limitation by the British Government of its claim on the produce and the commutation of this claim into a cash demand in *khalsa* villages involved similar action in *jagir* estates. The 43rd paragraph of the despatch constituting the Board of Administration provided that, in order to prevent *jagirdars* or other revenue-free holders from deriving more from the land than would be taken by the Government whose place they occupied, each village or tract which constituted a separate revenue-free tenure should be assessed. Accordingly the Board of Administration issued orders that, when any of the districts annexed in 1849 came under regular settlement, the revenue payable by all the *jagir* estates included in it should be determined by the Settlement Officers.‡ Shortly before this the Settlement Officers in the Cis-Sutlej States had been directed to bring all assigned villages under assessment.§ Hitherto only those *jagir* estates had been assessed in which a settlement was asked for either by the *jagirdar* or by the landowners. For one reason or another these orders were not fully carried out, and they did not really apply to the petty grants, the fields included in which were treated as *minhai*, i.e., excluded from the assessable area. In the early days of our rule landowners were very sceptical as to the benefits of a cash assessment, and sometimes preferred to give the *jagirdar* his dues in the way to which they had always been accustomed, and in a few instances, where the regular settlement broke down and had to be revised, our officers shrank from further reducing the income of assignees already affected by the change from grain to cash collections, and gave the proprietors of *jagir* estates the option of continuing to pay the excessive revenue assessed or resuming grain payments. To make a cash assessment of the small plots held by Brahmans and village servants, and limit the right of the assignees to the receipt of it, would have entirely altered the character of these assignments and made them almost valueless to the grantees. The Financial Commissioner's Book Circular LIII of 1860 brought together the instructions issued from time to time as to assignees of land-revenue. It is there laid down that any exception from the rule that all revenue-free holdings should be assessed, must be supported

*See Captain Wace's Settlement Report of Hazara, page 308.

†For a fuller account of the land tenures of Hazara, Chapter V of Captain Wace's Settlement Report may be consulted.

‡Board's Circular No. 13, dated 26th February 1852.

§Board's letter No. 447, dated 13th February 1852.

by special orders of the Financial Commissioner. Where both parties, the proprietors and the Government assignees, were satisfied, absolute compliance with the terms of settlement had not been enforced, but in case of dispute the courts must enforce compliance with them and, when once introduced, they could not afterwards be departed from.

179-A. Existing practice.—Section 48 (8) of the Land Revenue Act. (XVII of 1887) provides that “land *may* be assessed to land-revenue notwithstanding that that revenue, by reason of its having been assigned, released, compounded for, or redeemed, is not payable to the Government,” and it is the general policy of the administration to make no distinction in this respect between *jagir* and *khalsa* land. As the revenue must, in the absence of a special order of the Local Government to the contrary passed under section 48 (2) of the Act, be assessed in money (see the 5th of the Assessment Instructions of 1893 in Appendix I), it is the duty of a Settlement Officer either to determine a cash demand for assigned estates and holdings where grain collections have hitherto prevailed, or, if he thinks that the existing system should be continued, to apply for sanction to the adoption of this course. Even where the assignee is also landowner, the revenue must be assessed in order that the cesses may be calculated in the usual way.

180. Assignee's connection with the land sometimes amounted to a proprietary status.—While it was the general policy to treat *jagirdars* and *m'afidars* merely as standing in the place of Government, it was hard to deny that their connection with the land had in many cases grown into something much stronger. An assignee under the Sikh Government constantly interfered freely in the management of the lands included in his grant, especially as regards the waste, sinking wells, locating new cultivators and planting gardens. In this respect he merely claimed the same powers as the *kardars* exercised in *khalsa* estates, but with this difference that, as he hoped by one means or another to make his assignment a permanent one, he was prepared sometimes to spend his own money on the improvement of the property. In the case of small *m'afi* plots the assignee often cultivated himself or arranged for the cultivation. From this state of things difficult questions as to the ownership of assigned lands arose in our early settlements, and it was felt that in some cases the assignee had a claim either to the rights of a full proprietor or of a *talukdar*. The disposition to recognize such claims was somewhat strengthened by the change of feeling produced by the events of 1857, to which allusion has been made in paragraph 118.* When an assignee was recognized as owner of a *m'afi* plot, his proprietary right was usually confined to the land actually in his possession. He was a *malik kabza* merely, with no title to a share in the profits of the village common land. The superior title of the original owners of the estate was sometimes recognized by the imposition of a small proprietary fee or *malikana*, in which case the *m'afidar* combined the tenures of *malik kabza* with that of an inferior proprietor (*malik adna*) or became an occupancy tenant.

181. Settlement with assignees or with their heirs.—The question of the status to be assigned to an assignee was, of course closely connected with that of his right to claim a settlement when his grant was resumed.

*Cracroft's Settlement Report of Rawalpindi, paragraph 294-295.

His admission to one involved the idea that he possessed a proprietary title of some kind. In Book Circular LIII of 1860 the following rules on the subject were laid down, and these were reproduced with some alterations in the rules issued under the 1st Land Revenue Act (XXXIII of 1871).*

"The *ex-m'afidars* or heirs of deceased *m'afidars* are only entitled to demand the privilege of a sub-lease, supposing—

- (i) they reside in the village and own or cultivate the land,
- (ii) they have planted gardens, or have tombs, temples, or buildings on the land,
- (iii) they have sunk wells and improved the land,
- (iv) they can show some particular cause connecting them with the land. It is obvious that the great majority of *m'afidars* cannot urge these claims. In cases of peculiar hardship the Deputy Commissioner may recommend that the settlement be made with the *ex-m'afidars*.

"If their claim be admitted they are entitled to a sub-lease on half-assets, but they will pay their assessment through the *lamdars*. . . . Of the assessment thus calculated, 10 per cent. is deducted and left at the disposal of the *lamdars* to cover *pachotra*, *patwaris'* fees, road fund, school fund, *malta*, and *chaukidari*, the expenses of management and village cesses; but, if the *m'afidar* was in the habit of paying *malikana*, the sub-lessees will pay it still. The sub-lessees will have power to locate cultivators, but they are liable to be ousted from the lease at once as an intermediate tenure, should they fail to pay on demand to the *lamdars* the assessment and the 10 per cent. and *malikana* (where this last is proved to be demandable) at any time within one month before the instalments of the Government revenue fall due."

Provision was also made for the settlement of lapsed grants with the heirs of the late assignees at half the usual rates of assessment if the Deputy Commissioner considered the case one of hardship "proprietary or occupancy rights remaining undisturbed."†

182. Existing rule on the subject.—When the late assignee is not recorded in the record-of-rights as owner of the land of which the revenue has been resumed, the Collector must nevertheless consider whether his occupation or enjoyment of the land has been, as a matter of fact, such as to entitle him or his heir to be made liable for the land-revenue, and, if so, he must make him or his heir liable for the same for the term of the settlement.

183. Instructions issued with reference to the rule.—The following instructions have been issued with reference to the last section :—

• "When an *ex-m'afidar* or the heir of a *m'afidar* claims to become responsible for the payment of the revenue of a lapsed assignment, the Collector will enquire whether the history and circumstances of the holding lead to the conclusion that the *m'afidars* have actually held and enjoyed an interest in the land equivalent to a proprietary or sub-proprietary tenure, and entitling the claimant to a settlement under section 61 of Act XVII of 1887. The mere fact that another person or the village community is shown as owner in the record-of-rights must not be taken as justifying the summary rejection of the claim. It throws the burden of proof on the petitioner, from whom the Collector will require satisfactory evidence before holding that he is entitled to a settlement. It must be remembered that it is often difficult to decide from some of the older settlement records whether or not a *m'afidar* was admitted to be the owner of his *m'afi* plot. His name was usually shown in the ownership column with the title of *m'afidar*. Sometimes a note was added that he was owner as well as assignee, or that another person was owner. The tendency in later settlements has been to assume that the *m'afi*-

*The provisions as to cesses were changed and all reference to the circumstances under which an *ex-m'afidar* might be ousted from this holding was avoided.

†Book Circular XXXIX of 1860 and Rules under Act XXXIII of 1871 D. 13—IX.

dar had no proprietary title, and to record his fields as common land of the village, if no individual proprietor appeared to have any special connection with them. When a settlement is claimed, a careful inquiry must therefore be made. The manner in which the grant was originally acquired, and the questions whether at that time the land was waste or under cultivation and whether the *m'afidars* have cultivated themselves or arranged for the cultivation, putting in and ejecting tenants at pleasure, are of great importance. Although possession for three generations does not entitle the heir of a *m'afidar* to settlement if another person really has exclusive ownership of the land, length of possession may be a weighty element in the consideration. If it is proved that the *m'afidars* have tombs, temples, or buildings on the land, or that they have planted gardens, sunk wells, or effected other improvements, due weight must be given to these facts. The mere fact that a *m'afidar* always realized his dues by a share of the produce as a landlord would have done, does not prove that he was owner. In our earliest settlements *m'afi* plots were excluded from assessment and the assignee was frequently allowed to realize as before the old *hakimi hissa* in grain, and, notwithstanding that a cash assessment may afterwards have been fixed at re-settlement in pursuance of standing orders or to facilitate the calculation of the amount of local rate, the former arrangements as between the assignee and the cultivator were often continued without dispute. On the other hand, the fact that the *m'afidar* paid a small proprietary fee or *malikana* in grain or cash to the village community or some individual member of it, must not be taken as conclusive proof that he had no kind of inferior proprietary title (*milkiyat adna*). His heir will still be liable to pay *malikana* though a settlement is made with him. When such a settlement is made in future the assignee's heir will be responsible for all local rates and cesses in addition to the revenue imposed on the land. Settlements at favourable rates should be rarely adopted, and, when adopted, they should be distinctly noted and the reasons for them explained in the half-yearly statement of lapsed and resumed assignments. Such favourable assessments will hold good for the life or lives of the persons with whom they are made. The principle laid down in paragraph 174 of the Land Administration Manual will apply. Should a general revision of the assessment of a district take place during the life or lives of such persons, the land will be re-assessed in the usual manner, and the settlement will be made at the same proportionate rate on the new assessment. In dealing with cases of the nature above described, it cannot be too clearly kept in view that the status of the assignee as such is distinct from any status to which he may be entitled as proprietor, sub-proprietor, *muharraridar*, or tenant with right of occupancy. The latter status is not, like the former, excluded from the operation of the civil courts, and, in cases of dispute in regard to such matters, the ultimate resort to the courts is always available. But the revenue officer who is charged with the duty of settling lapsed revenue assignments should not refer the parties to the courts before taking action under the rules for assessment of such assignments and section 61 of the Land Revenue Act. He should make the settlement with the village proprietary body, the owner in severalty, or the assignee or his heirs, in accordance with the principles laid down above, and his action will have the same validity and finality as that of an officer charged with a general

assessment of the land-revenue acting under sections 50 and 61 of the Act. Mutation of names may follow, subject to the provisions of Section 97 of the Act, or a civil suit determining the proprietary status of the parties may possibly involve the necessity of a reconsideration of the settlement of the resumed assignment, but the claim of any person to be liable for an assessment of land-revenue is by section 158, clause (viii) of the Act, excluded from the cognizance of the civil courts, and the revenue officer's decision in regard to this matter will, therefore, not be liable to be disputed in the court.*

184. Rights acquired by lessees.—The rights acquired by the lessees of Government waste lands, who have fulfilled the terms of their leases have differed greatly at different times. They must be decided with reference to the stipulations on the subject embodied in the deeds of lease, the provisions of the rules in force when they were made, and, where the intention, of the rules is obscure, by the interpretation put upon them by the orders of Government. The matter is dealt with at greater length in the Land Administration Manual, Appendix III.

185. Native Governments claimed large rights over waste.—We have seen that native Governments claimed large rights over the waste, whether it was included in the somewhat uncertain boundaries of villages or consisted, as in the Western Punjab, of vast tracts of land covered with scanty grass and scrub *jangal* over which certain clans or families asserted a loose sort of dominion. In the hills the Raja possessed a definite and exclusive proprietorship in the forests and waste lands, and any rights over them enjoyed by his subjects were merely rights of user. The tendency of the British administration has been to withdraw from all interference with the management of the waste, where any community could assert any reasonable proprietary claim with reference to it and was likely ever to be able to bring it under cultivation, and further in some cases to transmute what were nothing more than rights of user into rights of ownership.

186. Three ways of dealing with waste—1. To include all of it in the boundaries of estates.—Without entering into details it may be said that Government has dealt with the waste in one of three ways. Where the village system was strong, the limits within which the cattle of each community grazed were known. It was the policy of Government to define these limits exactly so as to prevent disputes between adjoining estates which often ended in riot and bloodshed, and to treat all unoccupied waste included within the boundary of each estate as the common property of its owners. This was the plan generally carried out in the Eastern and Central Punjab. Even where the cultivated area was only a small part of the total area of the village, there was no thought of claiming the excessive waste as the property of the State. Even areas to which no private title could be established, such as the lands of deserted villages, were often restored to the former occupants where they could be traced. In the early days when the part of the country referred to above was put under settlement, and for

*An ex-assignee's rights may be those, not of a *mukarraridar* or inferior proprietor, but of a *dalukdar* or superior proprietor. The rights, if any, which the *ex-jagirdar* of a whole village possesses will be of the latter kind (Rev. Judg. I of 1894).

many years afterwards, it was the prevailing opinion that property in land was the last thing Government should seek to acquire or retain.*

187. Excess waste included in village boundaries.—But at the same time the Government was prepared to a certain extent to follow the practice of the native rulers whom it had succeeded by planting new settlements in villages which had more waste than they could manage or bring under cultivation within a reasonable period. Accordingly it was provided in section 8 of Regulation VII of 1822 that “where the waste land belonging to or adjoining any *mahal* is very extensive, so as considerably to exceed the quantity required for pasturage or otherwise usefully appropriated, it shall be competent to the revenue officers to grant leases for the same, to any persons who may be willing to undertake the cultivation, in perpetuity or for such periods as the Governor-General in Council shall determine, and to assign to the *zamindars* or others who may establish a right of property in the lands so granted an allowance equivalent to 10 per cent. on the amount payable to Government by the lessees in lieu and bar of all claim to or in the waste lands so granted.”†

188. Second way of dealing with waste to acknowledge that it belongs to the people, but reserve certain trees.—In Kangra, as we have seen, the State could properly have claimed the ownership of all the waste with some unimportant exceptions. But the policy of the settlements in the plains was unfortunately followed in dealing with an entirely different set of circumstances, and the waste became village property except that the State's rights in certain valuable kinds of trees were reserved. In Kulu the waste has been retained as the property of the State, subject to rights of user enjoyed by the people.

189. Third way of dealing with waste to include an ample area in village boundaries and claim the rest.—In the Western Punjab the villages cannot be said to have had any boundaries so far as the waste was concerned. Boundaries were laid down at settlement in such a way as to include in each estate an ample area of grazing land, and the rest of the waste was claimed as the property of the State.‡ In some cases the liberality shown in these arrangements was carried to excess. The extension of cultivation in the tracts in the west of the Punjab is only possible by the development of canal irrigation at Government expense, and obviously when the State is landlord as well as ruler, it has greater facilities for executing such improvements.

190. Appropriation of land thrown up by rivers for plantations.—It will sometimes be found that certain lands on the banks of rivers or islands in streams are recorded as Government property. Mr. E. Thornton,

* See e.g., paragraph 19 of the remarks on the system of Land Revenue Administration prevalent in the North-Western Provinces prefixed to Thomason's “Directions for Settlement Officers.” Cf., Cust's Revenue Manual, page 5; “There are cases in which Government may appear as actual owner of the soil, but unwillingly so, and sound policy suggests that such properties should be at once got rid of.”

† For the action taken with reference to deserted sites and excess waste in the Thanesar and Ambala districts, see Karnal-Ambala Settlement Report, paragraphs 106, 109, and 112.

‡ See paragraph 60 of Lord Dalhousie's despatch constituting the Board of Administration and paragraph 9 of the Board's No. 60, dated 17th January 1852, printed on pages 365-66 of Barkley's Non-Regulation Law of the Punjab. An interesting account of the action taken in the Western Punjab in a district containing both hill and plain *rakhs* will be found in Chapter VIII of Mr. Thomason's Settlement Report of Jhelum.

when Commissioner of Rawalpindi, proposed that when lands suitable for plantations were thrown up by rivers, arrangements should be made for the appropriation of a portion of them for this purpose. Sir John Lawrence approved of the suggestion, and in drawing attention to it, the Financial Commissioner remarked: "Where the extent of land thrown up is very large as compared with the area of the village adjoining, to which it would ordinarily appertain, the right of the village to the possession of the whole may well admit of question. Every case..... will be reported to the Commissioner,..... and the Deputy Commissioner should state whether any, and what, compensation should be given to the proprietors of the adjoining village."* The rules on the subject issued under the Land Revenue Act of 1871 were reproduced among the executive instructions contained in Revenue Circular No. 83, when it was first issued in 1890. But they were omitted in the revised edition, and would now perhaps be regarded as obsolete, and the provision that under certain circumstances lands exposed by the recession of a river will be claimed as Government property should not be acted on by a Settlement Officer without first obtaining the sanction of the Financial Commissioner. A proposal to assert that Government has a proprietary title in river beds was negatived in 1877.† But orders were issued that "in the administration paper of all villages adjoining or including rocky rivers or streams, a clause should be inserted reserving to Government the right to take without compensation boulders lying in the beds of rivers and streams in the village concerned."‡

191. Ownership of mines, quarries, &c.—The ownership of all mines of metal and coal and of gold washings by the State was asserted in section 29 of Act XXXIII of 1871 and again in section 41 of Act XVII of 1887, where earth-oil is also declared to be Government property. The title of Government being secured by legislation need not be referred to in records-of-rights. But care must be taken to safeguard any rights possessed by the State in forests, quarries, the spontaneous produce of land, and the like, by noticing them in the village administration paper. The law on the subject is a little intricate. The fact that a record-of-rights framed after the passing of Act XXXIII of 1871 does not expressly declare that any "forest, quarry, unclaimed, unoccupied, deserted or waste land, spontaneous produce, or other accessory interest in land" belongs to Government raises a presumption that it belongs to the land-owners of the estate in which it is situated. No such presumption arises in the case of records framed before the passing of that Act. Unless it is expressly provided in them that any forest, quarry, &c., belongs to the land-owners, it is presumed to be the property of the State. But the presumption "may be rebutted by showing—

- (a) from the record or report made by the assessing officer at the time of assessment, or
- (b) if the record or report is silent, then from a comparison between the assessment of villages in which there existed, and the assessment of villages of similar character in which there did not exist, any forest or quarry, or any such land or interest,

*Financial Commissioner's Circular No. 99 of 1855. Attention was again drawn to the matter in the Revenue Administration Reports for 1861-62 and 1862-63, and in circulars issued by the Financial Commissioner in 1864.

†Punjab Government No. 213, dated 2nd March 1877.

‡Financial Commissioner's Circular No. 8 of 1877.

that the forest, quarry, land, or interest was taken into account in the assessment of the land-revenue."*

The legal provisions referred to above carry out the policy laid down in a despatch from the Secretary of State, No. 85 of 25th March 1880, and Government of India letter No. 1—43, dated 15th May 1880.

192. Kankar.—The following instructions were issued in 1876 with reference to the claim of Government to the ownership of *kankar* found in village lands :—

"In the case of all villages in which *kankar* beds are known to exist, or in which there is any probability of their being hereafter discovered, an entry is to be made in the administration paper, when framed at settlement, declaring all *kankar* already discovered, or which may hereafter be discovered, to be the property of Government, and in such villages *kankar* is not to be reckoned as an asset of the village for the purpose of assessment.

"Where *kankar* beds are claimed as the property of the village or of individuals, the Settlement Officer will investigate the claim and, if it is supported by a judicial decision or by any relinquishment of the Government rights made by competent authority, will report the case for special orders. If in any such case it is decided that the Government rights have been lost or relinquished, the *kankar* should be taken into account in framing the assessment of the village."†

193. Saltpetre not treated as Government property.—The question of the rights of Government in saltpetre was raised in 1891 in connection with the settlement of the Hissar district when the Punjab Government held that neither the saltpetre earth nor the educed saltpetre can properly be brought under the term "spontaneous produce or other accessory interest in land" within the meaning of Section 42 of the Land Revenue Act. It was added that Sir James Lyall believed that "in practice the Government nowhere in the Punjab claims proprietary right in saltpetre earth, or a title to a monopoly of the right of educing saltpetre, though preceding native Governments may have claimed such a title. All that Government claims is the right of regulating or preventing the manufacture." Saltpetre or *shora* must not be recorded therefore as Government property in the village administration paper, and any profits which the land-owners derive from it, may be taken into account in assessing the land-revenue.‡ If for any reason they are left unassessed the fact that Government has not abandoned its right to assess them at some future time should be distinctly noted.

194. Management, sale and lease of Government waste lands.—The existing rules regarding the management, sale and lease of Government waste lands are noticed in the Land Administration Manual, Appendices III and IV.

*Section 42.

†Paragraphs 4 and 5 of Financial Commissioner's Circular No. 1-S. of 1876. The right of Government to dig for *kankar* without the consent of the land-owners was not admitted in 1866, when Mr. Cust's Revenue Manual was published (see page 94 of that book).

‡Punjab Government No. 650, dated 9th November 1891.

CHAPTER IX. On the rights of tenants.

195. Classes of tenants.—Tenants are usually considered to be of two kinds, occupancy tenants and tenants-at-will. The vernacular equivalents are *maurusi* or hereditary, and *ghair-maurusi* or non-hereditary.* An occupancy tenant has a right to hold his land so long as he pays the rent fixed by authority, and to pass it on to his descendants on the same terms. A tenant-at-will is a tenant from year to year, and his rent is determined by the agreement between himself and his landlord. The status of the occupancy tenant depends on law whether statute or customary, the status of the tenant-at-will depends on contract, though certain stipulations, if included in a contract of letting, will be treated by the courts as invalid.† A more detailed and precise classification of tenants is into—

- (1) occupancy tenants whose rights are determined by the provisions of Act XVI of 1887 ;
- (2) tenants of Government lands whose tenancies have been created under Act V of 1912 ;
- (3) tenants for a fixed term exceeding one year under a contract or decree or order of a competent authority ;
- (4) tenants from year to year.

But even this classification cannot be regarded as quite exhaustive. It does not include the mortgagor tenant whose fixity of tenure is secured by one of the statutory forms of mortgage allowed by the Punjab Alienation of Land Act, XIII of 1900, or some of the local forms of tenure referred to in paragraph 215. The position of the former is explained in the 41st paragraph of the Land Administration Manual.

196. Early history of occupancy right in the United Provinces.—The Punjab received the distinction between occupancy tenants and tenants-at-will with the rest of its early Revenue Code from the United Provinces. The possession of a right to fixity of tenure by many cultivators in northern India was early recognised. Indeed the fact that in Lower Bengal the connection of the persons whom we had recognized as proprietors with the land was often far more recent than that of the cultivators inevitably suggested that the latter had rights in the soil that required protection. Fixity of tenure of resident cultivators at rents determined by authority was a prominent feature of the Bengal settlement as originally planned.‡ Regulation XXVIII of 1803 professed to extend the Bengal system to the North-Western Provinces, but it left the subject of tenant right in a vague

*It is better to use these well known terms than to adopt translations of "occupancy" and "non-occupancy," such as *dakhilkar* and *ghair-dakhilkar*.

†Act XVI of 1887, Section 101 (b) and (c).

‡See Regulations II, XXXIII and LI of 1895. For an interesting discussion of the whole question Mr. R. M. Bird's Minute, dated 25th September 1832, printed on page 419 of Selections from the Revenue Records of the North-Western Provinces Government, 1822—33, may be consulted.

and uncertain condition. The provisions of Regulation VII of 1822 were more definite. By its 9th section Settlement Officers were required not only to prepare a record of "persons enjoying the possession and property of the soil, or vested with any heritable or transferable interest" in it, that is to say, of proprietors, but also of "the rates per *bigha* demandable from the resident cultivators, not claiming any transferable property in the soil whether possessing the right of hereditary occupancy or not." But, as already noticed, small progress was made with the settlement of rights till Regulation IX of 1833 was passed. In the discussions which preceded the passing of that Act the rights of tenants were much referred to, but it is clear that no very definite conclusions on the subject had yet been generally reached. Mr. R. M. Bird held that every tenant who lived in a village had a right to have his rent fixed by Government, however long or short had been his residence, and was entitled to occupy the land as long as he paid the rent. Rents should be fixed for the term of settlement, and be revised simultaneously with the revision of the land revenue. Non-resident or *pahikash*t tenants had no such rights, and should be left to make their own bargain with the land-owner.* Lord William Bentinck in a Minute, dated 26th September 1832, observed :—† "I have little hesitation in declaring my conviction that there is very generally all over India a description of *raiyyats* having a proprietary title in the lands cultivated by them. These *raiyyats* are termed *mirasidars*, *mirasi maurusi*,‡ *khudkash*t, *kadim*, and have other designations. Those resident *raiyyats*, again, who may acquire a sort of possessory title by prescription, are called *chapparbands*, *jama'*, *jadid*, and other appellations." The former class had possessed a right "of appropriating the surplus produce of the soil after satisfying the Government demand, and should be treated as proprietors as regards the enjoyment of the profits arising out of the limitation of the Government demand." The second class had possessed no defined rights, but were "entitled to consideration on proof of prescriptive occupancy." Lord William Bentinck dissented entirely from Mr. R. M. Bird's view that all resident cultivators were "entitled to have their rents fixed without reference to the term of their residence." "It should," he remarked "always be borne in mind that, though there may be cultivators who have proprietary right or rights of occupancy, it does not follow that all cultivators have such rights. The greatest care should be taken. to avoid confounding the mere agricultural labourer (or individual who, having settled in the village as a stranger many years ago, has ever since continued to cultivate at the discretion of the *zamindar*), with the hereditary *raiyyat*, whose ancestors perhaps first broke up the soil and paid the revenue or rent of the lands direct to the servants of the State." In an earlier Minute he had observed that "wherever a resident cultivator may be found who has paid the same money rate for a consecutive period of twelve years, it is fair on every ground to determine that neither he nor his successor shall be subjected to any enhanced demand."§

*See Minute referred to in note on page 96.

†Page 385 of Selections from the Revenue Records of the North-Western Provinces Government, 1822—33. The paragraphs from which quotations are taken above are 35, 41, 42 and 44.

‡*Maurusi* was not yet appropriated as a title for occupancy tenants.

§Paragraph 72 of a Minute, dated 20th January, 1832, printed on page 351 of Selections from the Revenue Records of the North-Western Provinces Government, 1822—33.

197. Accepted ideas as to occupancy right at annexation of Punjab.—The accepted ideas on the subject of tenant right fifteen years later, that is to say, about the time of the annexation of the Punjab, may be gathered from the following extracts from the Directions for Settlement Officers :—

“ There can be no doubt that many non-proprietary cultivators are considered to have rights of occupancy, and thus two classes are commonly recognized, those who are entitled to hold at fixed rates, and those who are mere tenants-at-will. Cultivators at fixed rates have a right to hold certain fields, and cannot be ejected from them so long as they pay those rates. They are not able to alienate them without the consent of the proprietors, but their sons or their immediate heirs, residing with them in the village, would succeed on the same terms as themselves. Nor are they competent of themselves to perform any act which is considered to indicate proprietary right, such as the digging of a well, or the planting of a garden, or the location of a labourer. The simple right is to till their fields themselves, or to provide for their tillage, and for these fields they pay certain rates, and are in some cases liable to be called upon to perform certain services or to pay certain fees to the proprietors. So long as these conditions are fulfilled they cannot be ejected from their fields, and, if an attempt is made to eject them, they have their remedy by summary suit before the Collector. If they fail to pay the rent legally demandable, the proprietor must sue them summarily for the arrear, and, on obtaining a decree and failing to collect his dues, he may apply to the Collector to eject them..... It is impossible to lay down any fixed rule defining what classes of cultivators are to be considered entitled to hold at fixed rates. They are known in different parts of the country by different names, as *chapparband*, *khudkasht*, *kadmi*, *maurusi*, *hakkdar*, &c., all of which terms imply attachment to the soil or prescriptive right. Those who have no such right are commonly called *kacha asamis* or *pahikasht*. It has sometimes been supposed that all *raiyyats* resident in the village (*khudkasht*) are of the former class, and that those who reside in another village (*pahikasht*) have no rights. But there are frequent exceptions to this rule. Many cultivators residing in the village are mere tenants-at-will, whilst those residing in neighbouring villages may have marked and recognized rights. Prescription is the best rule to follow. Those who have for a course of years occupied the same field at the same or at equitable rates are held to possess the right of continued occupancy whilst those whose tenure is not similarly sanctioned are considered tenants-at-will.”* Mr. Thomason was unable to lay down any fixed directions as to the determination of the rents of occupancy tenants.†

198. Grounds of occupancy right recognized in early Punjab settlements.—It seems to have been common in the United Provinces to admit twelve years’ uninterrupted possession of a holding at the same rate of

*Direction for Settlement Officers, edition 1849, paragraphs 127, 128 and 130.

† Ditto ditto paragraph 134.

rent as a sufficient proof of occupancy right. The twelve years' rule* was very generally adopted in early Punjab settlements, though the best revenue officers held that it should not be regarded as the sole criterion, and that the quality, as well as the length, of occupation should be considered.† Afterwards it became usual to draw a distinction between resident tenants, to whom the term *asami* was sometimes exclusively applied, and non-resident or *pahikasht* tenants, and to accept twelve years' possession as sufficient in the case of the former and twenty years in the case of the latter. In some settlements a file embodying the decisions as to the status of all tenants (*naksha mudakhilat* or *misl tankih hukuk muzaraán*) was drawn up for every estate, and this is of great value in case of disputes. As a matter of fact in the absence of definite rules every Settlement Officer decided such cases as came before him according to his own view of what was right and proper. For example, grounds which one man would have considered enough to establish a claim to a proprietary title, another might regard as only sufficient to justify him in treating a cultivator as an occupancy tenant. *Patwaris* and other inferior native officials, who practically decided the status of cultivators in a great many cases, naturally followed the only definite rule they knew, which was that based on length of possession.‡ Landlords had not awakened to the profits to be derived from a cash assessment, and indeed these profits were mostly prospective. They were, therefore, little disposed to contest entries, the immediate effect of which was to make tenants share in the burden of a money demand which they dreaded, and where land was abundant and hands scarce the landowner was sometimes more eager to concede, than the tenant was to accept, an occupancy title.§ In some places tenant right was held to be transferable, in others not, and the local customs on this point were really various.

199. Determination of rent in early Punjab settlements.—

In the matter of fixing rents there was great diversity. In many instances it appeared that, with the exception of a few headmen, all cultivators, whether they belonged to the original proprietary body or not, had paid revenue on equal terms by division of crop or appraisal to the Sikh tax-gatherer, in others it was shown that the land-owners had been in the habit of receiving from the inferior cultivators under the name of *malikana*, *biswi*, or *ismi* some trifling share of the produce, or an *anna* in the rupee in the case of *zabti* crops, i.e., crops for which the State took a money payment. Settlement Officers exercised the power of regulating the rents of occupancy tenants, and even it would seem in some districts of tenants-at-will. In Rawalpindi and Attock, Major Cracroft fixed the rents of both occupancy tenants and tenants-at-will, and very generally at exactly the same rates.|| Conditions

*The rule sometimes took the form of twelve years' occupation before annexation.

†Paragraph 18 of Sir Richard Temple's Review of Mr. R. E. Egerton's Lahore Settlement Report. Cf. Sir John Lawrence's remarks in paragraph 3 of his Secretary's letter No. 1010, dated 11th December 1855, to the Financial Commissioner—"The Chief Commissioner is not aware that a period of twelve years. has ever been authoritatively fixed. A Settlement Officer should be aware that it is the nature quite as much as the length of occupancy which entitles a cultivator to privileges."

‡Settlement Commissioner's No. 12, dated 12th January 1865, paragraph 8.

§Elphinstone's Settlement Report of Gugera, paragraph 50. Cf. Morris' Settlement Report of Gujranwala, paragraph 33, and O'Brien's Settlement Report of Muzaffargarh, page 95.

||See Butler's Settlement Report of Attock tahsil, paragraph 26.

were entered in village administration papers forbidding any alteration of the rents of occupancy tenants during the term of the settlement, and a general provision to the same effect was inserted in the Punjab Civil Code.* Our first Settlement Officers had a strong prejudice against grain rents, and it seemed to them natural and only equitable when they commuted the grain payment into a cash assessment in the case of the landlord, to do the same in the case of the tenant. And the landlords' great distrust of their ability to pay a money demand regularly no doubt often led them willingly to acquiesce in these proceedings. Very frequently no *malikana* at all was fixed unless the tenant was shown to have been in the habit of paying *sermani* or some other proprietary fee. Where one was imposed, it took the shape of a trifling percentage on the land revenue. Gradually the expediency of always making the tenant pay more or less *malikana* was admitted,† and in settling the amount more liberality was shown to the landlords after 1857 than had been usual at an earlier period. There was less disposition than formerly to commute grain into money rents. The official objections to division of crop had grown weaker, and landlords were now anxious to maintain it wherever it still existed.‡

200. Tenant-rights controversy—arguments for restricting occupancy rights.—In the sixties when the first regular settlements of the districts of the Central Punjab were being revised under Mr. Prinsep's supervision, tenant right became the subject of a keen controversy. It was urged by Mr. Prinsep that occupancy right had no real foundation in village custom or even in the condition of things produced by the levelling fiscal administration of the Sikhs, but was in fact a creation of our own rule,§ and amounted to the confiscation by administrative action of the rights of the land-owners. The latter had always possessed a right to evict, and had exercised it much more freely than was usually supposed. The extent of the interference of Sikh *kardars* in such matters had been greatly exaggerated. It was not denied that certain classes of cultivators deserved, and would by village usage receive more consideration than others. But the rules by which Settlement Officers had determined what these classes were, and the degree of protection which they had afforded to them, were quite inconsistent with native customs and ideas. The importance attached to mere length of occupation and the grant of a permanent tenure to village menials and to non-resident tenants were examples of the first kind of error, the assertion that an occupancy tenant could under no circumstances be evicted so long as he paid his rent was an instance of the second. The entries by which tenants were recorded as hereditary at the first regular settlements had been made in the most mechanical way without any real enquiry. A few of the recorded occupancy tenants should have been shown as inferior proprietors, while

*Punjab Civil Code, Part I, Section XXI, clause 13. The Code was issued in 1854.

†Financial Commissioner's No. 4543, dated 14th December 1863. The Financial Commissioner "agrees in thinking that to declare an hereditary cultivator permanently exempt from all demand of *malikana* is altogether anomalous."

‡Cracroft's Settlement Report of Rawalpindi, paragraph 303—"Of late years it appears to be acknowledged on all sides that rent in kind is not so bad a thing after all. The proprietors cling to grain payments with a tenacity impossible to overcome..... We have at last adopted a policy of non-intervention in the matter."

§*Cf.*, paragraph 17 of the Financial Commissioner's (Mr. R. Cust's) Review of Gugera Settlement Report.

others had a right to retain possession of their holdings except where the land-owner required the land for his personal use,* and even in that case were fairly entitled to protection for a limited period or perhaps to compensation for disturbance, if they had effected improvement. But very many of them ought to have been classed as mere tenants-at-will. As each district was re-assessed the mistakes made at the first regular settlement should be rectified, and under Regulation VII of 1822 and executive instructions Settlement Officers had power to make such corrections. The use of the term *maurusi* was objectionable. Privileged tenants should be recorded under the names by which they were locally known, and the particular incidents of each tenure should be carefully noted.

201. Arguments on the other side.—It was urged on the other side that, although the name by which occupancy right was described was new, the thing itself had a substantial existence before our rule began. The liabilities of very many tenants had been the same as those of the landlords and their privileges had been little, if at all, less. Resident tenants had often been settled on the land by the Sikh *kardars* and would have been maintained in possession had any landlord attempted to oust them. Even where they got the land originally from the land-owners the latter had never thought of evicting them. It was only equitable that men who had borne the burdens of native rule should share in the benefits of the more liberal administration which had succeeded it. The statement that the entries at the first regular settlements had been made without inquiry was exaggerated. Native subordinates had to guide them by the decisions of Settlement Officers in contested cases. If these were not numerous, it showed that at the time all parties were satisfied with what was being done. At any rate it would be unjust and impolitic to disturb at a revised settlement entries which had been acted on for years, and in fact no legal power to do so existed.†

202. Alteration in Mr. Prinsep's settlements of entries of former settlements.—There was a large element of truth in Mr. Prinsep's contention. The degree of protection which tenants enjoyed and the grounds which entitled them to protection differed in different parts of the country. The rule that twelve years' possession conferred occupancy right was quite arbitrary. The sinking of a well would probably have been accepted everywhere as a sufficient foundation for a claim to permanent title of some sort. But in the case of non-proprietary cultivators fixity of the tenure as a thing which could be earned by bringing waste land under the plough or by ordinary improvements had perhaps no real existence except in the hills and in the south-western districts. When a body of loose and varying local customs is poured into the mould of rigid definition it is certain to be changed in the process, and it is well to delay the operation till the customs have been fully ascertained. It might have been better, therefore, at the first regular settlements to record tenants by the names by which they were locally known and to note carefully the incidents of the tenure in each case. But the policy of altering former records of right was open to grave doubt. This is, however,

*In this connection Mr. Tucker's description of the position of *lawani* tenants in Kohat is worth reading (Settlement Report, paragraph 192).

†See proceedings of Lahore Tenant Committee forwarded to Government with Judicial Commissioner's No. 1179, dated 5th May 1865.

what Mr. Prinsep did with the sanction of the Financial Commissioner.* A few of the recorded occupancy tenants were made proprietors, a much larger number continued to be shown as *maurusi*, but the majority were treated either as tenants-at-will or as protected (*panahi*) for life, for the term of settlement, for fixed periods varying from two to thirty years, or while some service was performed, some religious institution maintained, or some revenue-free grant was continued.

203. Passing of Act XXVIII of 1868.—The tenant-right controversy which arose in connection with Mr. Prinsep's settlements led to the passing of the first Punjab Tenancy Act, XXVIII of 1868, the main features of which have been reproduced in Act XVI of 1887. The changes in the status of tenants effected by Mr. Prinsep were held to be invalid and measures were taken to restore the entries of the first regular settlement. These were not carried out completely, and at the re-settlement of the districts concerned it was found that a number of tenants were still shown as *panahi* or protected for various periods. It was held that under section 37 of the Land Revenue Act of 1887 the record could only be altered by agreement of the parties or in consequence of a decree of court declaring whether the tenant was or was not an occupancy tenant.†

204. Working of Act XXVIII of 1868.—A full account of the provisions of Act XXVIII of 1868 will be found in paragraphs 145—147 of the Directions for Settlement Officers and paragraphs 219—254 of the Directions for Collectors (Barkley's edition). With its passing it ceased to be the duty of a Settlement Officer to revise the rent of occupancy tenants at a re-settlement. Rents consisting of the land revenue and cesses with or without the addition of *malikana* were re-adjusted in the manner described below (paragraph 217), and in a few cases the old rents were left untouched at the request of the landowners.‡ The provisions of the Act relating to enhancement were unsatisfactory and difficult to work. But fortunately for many years very few enhancement suits were instituted. "This was partly due to ignorance of the law and partly to the fact that the proprietors with very few exceptions (did) not believe that they had any real right to claim an enhanced rent."§ Entries in the village administration papers of the first regular settlements declaring that rents should not be changed during settlement, which operated as agreements between landlords and tenants under section 2 of the Act, were also a bar to enhancement suits during the term of settlement.

205. Act XVI of 1887.—The apprehension that difficulties would arise in Hoshiarpur and elsewhere when this bar was removed by revision of settlement was one of the reasons for the passing of Act XVI of 1887. The tenancy law of the Punjab concerns all revenue officers, and a description of the chief provisions of Act XVI of 1887 is given in Chapter II of the Land Administration Manual. A few remarks on rent and a brief discussion

*Financial Commissioner's No. 2279, dated 6th June 1865.

†See Colonel Wace's memo., dated 18th February 1889, on page 1176, and Sir James Lyall's note, dated 27th May 1889, on page 1182 of Selections from the Records of the Financial Commissioner's Office—New Series.—No. 14.

‡See note by Sir James Lyall forwarded to the Government of India with Punjab Government No. 111, dated 21st March 1882.

§For the complete definition see section 4 (5) of the Act.

of the different kinds of occupancy right will, however, not be out of place here.

206. History of rent in the Punjab.—Rent is defined in the Act as “ whatever is payable to a landlord in money, kind, or service by a tenant on account of the use or occupation of land held by him ” [section 4 (8)] and tenant as “ a person who holds land under another person, and is, or but for a special contract would be, liable to pay rent for that land to that other person.”* The kinds of rent commonly met with are noticed in Chapter XVIII. The chief fact in connection with the history of rent in the Punjab is that it owes its origin mainly to fiscal arrangements, and not directly to economic causes.† This is obvious in the case of the rents consisting of the land revenue and cesses with or without a small additional payment on account of *malikana*, which are still commonly paid by tenants-at-will, in some parts of the country. But it is equally true of *batai* and *zabti* rents. The former represent the share of the produce which native governments claimed under the name of *mahsul* or *hakimi hissa* (i.e., the ruler's portion). When the British Government commuted this into a cash revenue demand the landlords continued to take it under the old names and at the old rates from the tenants, and the rates have often remained unchanged to the present day. The small grain fee which the proprietors sometimes realized in the days of Sikh rule is even now very frequently set aside as a separate item when the crops are divided. In this case too the former names are used and the traditional fraction is commonly taken. *Zabti* rents are still paid in many places for the crops for which the Sikhs took cash payments. *Chakota* rents, i.e., rents consisting of a fixed amount of grain in the spring and a fixed amount of cash in the autumn harvests have a similar history.‡ Even fixed cash rents often originated in the revenue arrangements, but they are more susceptible of re-adjustment on an economic basis than other kinds of rent. The importance of studying the history of rent in any tract which is being assessed will appear in the sequel (see Chapter XX).

207. Acquisition of occupancy right.—Under Act XVI of 1887 no tenant can obtain a right of occupancy by mere lapse of time (section 9),§ and, unless a special custom to the contrary is proved, no joint owner of land can acquire one in any part of that land (section 10). For example, a proprietor who is in cultivating possession of fields in the village common, cannot claim a right of occupancy under section 5 (1) (a), though all the circumstances exist which would enable another person to do so successfully. The first of these provisions embodies a marked difference between the law of the Punjab and that of other parts of Northern India as to the acquisition of occupancy right. The facts which are sufficient to establish a right of occupancy are set forth in sections 5 and 6 of the Act, while section 8 saves any local customs by which a permanent tenure is acquired on grounds other than those described in these two sections, and section 11 any rights already acquired under Act XXVIII of 1868. If a tenant

*For the complete definition see section 4 (5) of the Act.

†Some interesting observations on rent in India will be found in the VIth Chapter of Maine's “ Village Communities in the East and West.”

‡See Mr. Prinsep's Settlement Report of Sialkot, paragraph 242.

§This section reproduces the provisions of section 9 of Act XXVIII of 1868.

voluntarily exchanges one plot for another, the land taken in exchange is held to be "subject to the same right of occupancy as that to which the land given in exchange would have been subject, if the exchange had not taken place," (section 7.)

208. Classes of occupancy tenants.—Considered with reference to the incidents of their tenures occupancy tenants fall into three classes :—

- (1) Tenants under section 5 (1) (a).
- (2) Tenants under section 5 (1) (b), (c) and (d).
- (3) Tenants under sections 6 and 8.

209. Occupancy right of the first class how established.—

The first class includes every tenant who on 1st November 1887 had "for more than two generations in the male line of descent through a grandfather or grand-uncle and for a period of not less than twenty years been occupying land paying no rent therefor beyond the amount of the land-revenue thereof and the rates and cesses for the time being chargeable thereon," [section 5 (1) (a).] The date mentioned is that on which the Act came into force. Thirty years' occupation at the rent named raises a presumption that the tenant possesses the qualifications described above, but this presumption may be rebutted.* It must be remembered that "tenant" in Act XVI of 1887 includes "the predecessors and successors in interest of a tenant,"† and that words in section 5 (1) (a) denoting natural relationship denote also relationship by adoption, including the customary appointment of an heir, and spiritual relationship, such as that of a *chela* to his *guru* or father in the faith.‡ Sir James Lyall construed "land-revenue" in section 5 (1) (a) as including *batai* and *zabti* collections made by *jagirdars* before a cash assessment had been introduced. He considered that the definition of "land-revenue" in section 4 (10) as "land-revenue assessed under any law for the time being in force" did not prevent this interpretation, which was clearly equitable and in accordance with the intentions of the Act. He remarked :—"I am of opinion that it is not necessary to construe the word *law* here as if it was equivalent with Act. I believe there was no Act or Regulation for the assessment of the land-revenue, strictly speaking, in force in the Punjab before 1871, and at the present day in Madras or the greater part of that Presidency, there is no statute law for the assessment of the land-revenue. The Government of Madras acts in imposing it upon the old customary law of India. It is to this law that I understand the preamble of Punjab Land Revenue Act, XXXIII of 1871, refers. No enactments were repealed by that Act.

"Putting aside the question of interpretation of the word *law* in section 4 (10) of the Act, and coming to Section 5 (a) it is manifest that that section is intended to deal with a question between the landlord and tenant, and the question is, has the tenant paid as rent (*i. e.*, as due to the landlord—see definition of rent) anything more than land revenue and rates and cesses chargeable? Now, as a matter of fact, unless the tenants we are concerned

*Section 5 (2). The period of 30 years is counted back from the date of the institution of the suit, not from the date of the passing of the Act (Rev. Judg. 5 of 1896, P. R. of June 1896).

†Section 4 (7).

‡Section 5 (3).

with (i. e., those who have paid revenue and cesses without *malikana* since Settlement) paid the proprietors a *sermani* fee while *batai* was in force (in which case we may be sure a cash *malikana* was put on in place of *sermani* as that was the invariable rule in the old settlements), they really paid the landlord no rent at all so long as the *jagirdars* maintained *batai* collections in respect to both proprietors and tenants of this class, for the *jagirdars* collected direct from these tenants as from the proprietors; these men therefore paid nothing in those days as rent to the landlords, and what they paid direct to the *jagirdars* they paid undoubtedly as the old land-revenue and cesses of the country. These *batai* and *zabti* collections are the ancient form of the land revenue of India."*

210. Occupancy right of the second class how established.—
The second class includes every tenant—

- (1) "Who, having owned land, and having ceased to be landowner thereof otherwise than by forfeiture to the Government or by any voluntary act, has, since he has ceased to be landowner, continuously occupied the land," [section 5 (1) (b).] The right may be claimed by the representative of the person who lost the proprietary right (Revenue Judgment No. 6 of 1895 in Punjab Record of September 1895).

A claim is rarely maintainable under this sub-section.

A man who has sold his land but continues to cultivate it is of course a mere tenant-at-will of the purchaser.

- (2) "Who, in a village or estate in which he settled along with or was settled by, the founder thereof as a cultivator therein, occupied land on the twenty-first day of October 1868, and has continuously occupied the land since that date" [section 5 (1) (c)], unless the landlord proves "that the tenant was settled on land previously cleared and brought under cultivation by, or at the expense of, the founder." The 21st October 1868 is the date on which the first Punjab Tenancy Act came into force.
- (8) "Who, being *jagirdar* of the estate or any part of the estate in which the land occupied by him is situate, has continuously occupied the land for not less than twenty years, or having been such *jagirdar*, occupied the land while he was *jagirdar* and has continuously occupied it for not less than twenty years," [section 5 (1) (b)]. *Jagirdar* includes any assignee of land other than a village servant.† A *jagirdar* under a grant made by a former Native Government falls within the definition of that term in the Tenancy Act (Revenue Judgments 2 of 1892 and 2 of 1897 in Punjab Record of March 1892 and February 1897, respectively).

*Revenue Circular 17, paragraph 13, edition of 1890.

†Section 4 (15).

211. Occupancy right of the third class how established.—
The third class includes—

- (1) any tenant entered in a record of rights sanctioned by the Local Government before the passing of Act XXVIII of 1868, as a tenant having a right of occupancy in land which he has continuously occupied from the time of the preparation of that record unless by a decree of a competent Court in a suit instituted before the passing of Act XVI of 1887 he has been declared not to possess such a right (section 6), and
- (2) any tenant who can establish a right of occupancy on any grounds other than those described in sections 5 and 6, (section 8). This refers specially to the rights which by the custom of particular parts of the country persons effecting improvements or bringing waste under cultivation acquire. Examples are the *lathband* or *lathmar* tenant of Dera Ismail Khan and Dera Ghazi Khan who obtains his title by embanking fields and the *butemar*, or *mundhimar*, who earns it by clearing *jangal*.* The rights of the *taraddadkar* tenants of the Jhang district seem to have been acquired by merely engaging to keep in cultivation the lands attached to a well constructed by the owner. They must be distinguished from those of the *taraddadkar* owner described in paragraph 173. It is very doubtful whether the right of *taraddadkar* to sublet is limited by section 58 (2) of the Tenancy Act. According to Mr. Steedman "all *taraddadkars* have the power of arranging for the cultivation. It does not matter whether the *taraddadkar* cultivates himself or by a tenant."† The *mukarraridar* tenant of Attock cannot be considered as falling under section 8 or any other section of the Punjab Tenancy Act, for he has by custom more unrestricted powers of alienation than any class of occupancy tenant enjoys under Act XVI of 1887, and holds his land at a fixed rent which cannot be altered during the term of settlement. It has been judicially decided that some *mukarraridaris* descend like owner's holdings, and are not subject to the special rules referred to in the next paragraph.‡

The *mukarraridar* almost invariably acquired his title by sinking a well, but there are a few *mukarraridars* in Attock whose holdings consist of unirrigated lands. The *kuhmar* tenant of Dera Ghazi Khan got his title in the same way, and * his

*In Dera Ismail Khan many of the *lathband* and *butemar* tenants were recorded at last settlement as inferior proprietors (see paragraph 171). Contrast paragraphs 197 and 203 of Mr. Tucker's Kohat Report. For the peculiar *godhash* tenure see Multan Gazetteer, page 179. The due known as *bhoang*, which the *godhash* tenant is entitled to take harvest by harvest as the reward for clearing *jangal* and the title to which he can sell, corresponds to the *anwanda* of the clearing tenant in Dera Ghazi Khan (Gazetteer of Dera Ghazi Khan, page 82).

†Compare paragraph 173 in this manual and see paragraph 84 of Steedman's Settlement Report of Jhang.

‡For the *mukarraridari* tenure see Revenue Judgment No. 10 in Punjab Record of November 1896. The revision of rent after the expiry of a settlement would probably be made under the provisions of section 34 of the Tenancy Act.

tenure lasts as long as the *pakka* brick or wooden well he has sunk last. ”* In Hazara we find the curious feature of occupancy tenants holding their land not from the proprietors, but as sub-tenants of other occupancy tenants.†

212. Devolution of occupancy right.—On the death of an occupancy tenant his holding passes on a like tenure—

- (a) to his male lineal descendants in the male line of descent,
- (b) failing them, to his widow for life or until remarriage, but without any power of sale, gift, or mortgage, or of subletting for a period exceeding one year,
- (c) failing male descendants and a widow, or, when a widow succeeds, then after her death or remarriage, or in the event of her abandoning the land, to agnates or male collateral relatives in the male line of descent, provided that the common ancestor of the late tenant and the agnates occupied the land. Among agnates the right of occupancy falls to the person or persons who would have inherited the land if it had been owned by the deceased. On failure of legal heirs the holding reverts to the landlord (section 59).

213. Rights possessed by all classes of occupancy tenants.—Every occupancy tenant has a right to make improvements as defined in section 4 (19) of the Act (section 63), notwithstanding any condition in a record-of-rights, or in an agreement between himself and his landlord to the contrary. He can also, subject to the provisions of the Act and to the stipulations of any written contract between himself and his landlord sublet his land for a term not exceeding seven years (section 58). He forfeits his right if for over a year he fails without sufficient cause to cultivate his holding either by himself or some other person and to arrange for payment of the rent (section 38), but he can only be ejected (a) in execution of a decree for ejectment or (b) when a decree for an arrear of rent has been passed and remains unsatisfied (section 42) after notice requiring payment within 15 days has been served upon him under the orders of a revenue officer (section 44). A decree for ejectment will only be passed on one or other of the following grounds :—

- (a) that the tenant “has used the land comprised in the tenancy in a manner which renders it unfit for the purposes for which he held it” ;
- (b) “where rent is payable in kind, that he has without sufficient cause failed to cultivate that land in the manner or to the extent customary in the locality in which the land is situate.”—(section 39).

214. Occupancy right how far transferable.—A tenant belonging to either of the first two classes can transfer his right of occupancy by sale, gift, or mortgage. But he must first give notice of his intention through a revenue officer to his landlord, and the latter may then claim to purchase

*Mr. Fryer's Settlement Report of Dera Ghazi Khan quoted on page 86 of Mr. Diack's Gazetteer.

†Captain Wace's Settlement Report of Hazara, page 131.

the right at its fair value as determined by a revenue officer, (section 53). The landlord's power of pre-emption does not arise in the case of collateral mortgages not involving any actual or constructive transfer of possession to the mortgagee, unless the transaction be of the description known as *bai-bil-wafa*, or mortgage by conditional sale.* Tenant right of the third class cannot be transferred by private contract without the previous written consent of the landlord, (section 56). Nor can it be attached or sold in execution of a decree or order of Court (section 56). Tenant right of the first two classes is not protected from sale in execution, but the landlord has a right of pre-emption if it is sold (section 55).

215. Rights not expressly provided for by law.—Rights possessed by any class of occupancy tenants, which are not expressly provided for by law, should be carefully described in the village administration paper. Under orders issued in 1887 Settlement Officers were enjoined to “notice in their records of local usages the custom relating to the right of occupancy tenants to lands submerged by fluvial action and subsequently restored.”†

216. Enhancement and reduction of rent.—Where an occupancy tenant pays a grain or *zabti* rent it can only be enhanced or reduced if the quality of the cultivation is changed by the land becoming, or ceasing to be, irrigated or flooded (sections 20 and 21). If he pays a cash rent it may be enhanced on the suit of the landlord on the ground that, after deducting the land revenue and the rates and cesses chargeable on the holding, the balance does not amount to a *malikana*—

- (a) of two *annas* in the rupee, or $12\frac{1}{2}$ per cent. on the land revenue in the case of a tenant of the first class ;
- (b) of six *annas* in the rupee, or $37\frac{1}{2}$ per cent. on the land revenue in the case of a tenant of the second class ;
- (c) of 12 *annas* in the rupee, or 75 per cent. in the case of a tenant of the third class. Enhancement may be decreed up to the limit fixed for the class of tenants to which the defendant belongs (section 22). Subject to these limits a Revenue Court has full discretion as to the amount of enhancement to be decreed (section 25). Too much weight should not be given to the class to which the occupancy tenant belongs. Tenants of old standing who have hitherto paid a very light *malikana* may often only be able to prove that their status falls under section 6. The most important points to consider are the rate of *malikana* hitherto paid and those commonly realized from similar occupancy tenants in the neighbourhood. The law has given the landowners a claim to an increased rate of profit, and this must be fairly satisfied. But sudden and severe enhancements are much to be deprecated. In some settlements a scale of enhancements drawn up by the Settlement Officer has been approved as a useful general guide

*See Regulation XVII of 1806.

†Financial Commissioner's Circular XXI of 1877 issued in consequence of Chief Court judgment in case No. 1389, of 1876. The recorded customs on the point are not uniform, see, e.g., Mr. Fryer's Settlement Report of Dera Ghazi Khan, paragraph 225, Mr. Tucker's Dera Ismail Khan Report, paragraph 184, Mr. Thorburn's Bannu Report, paragraph 143. It may be doubted whether there is often any real custom one way or the other.

for Revenue Courts.* But of course they are in no way bound to follow it exactly.

If enhancement has been decreed or a suit for enhancement has been dismissed on the merits no further suit will lie for ten years, unless the land has meanwhile become irrigated or flooded [section 24 (8)]. The cash rent payable by an occupancy tenant may be reduced on the ground that the productive powers of his holding have been lessened by a cause beyond his own control (section 28). The reduced rent must in no case be less than the land revenue and cesses payable on the holding (section 25).

217. Adjustment of rents.—Settlement Officers have now no power to commute grain into cash rents or *vice versa* without the consent of both landlord and tenant (section 18). Rents fixed in terms of the land revenue and cesses, with or without the addition of *malikana*, may be adjusted at a re-assessment. The new rent will consist of the revised revenue demand and cesses, or, if the former rent included *malikana*, of these items with the addition of *malikana* calculated at the old rate on the new revenue (section 27).

218. Statutory Government tenants.—When cultivators are being settled in large numbers on State land, it would be inconvenient if a separate lease had to be drawn up for each holding and if all the provisions of Act XVI of 1887 applied to the new tenancies. Accordingly it was provided in Act III of 1898, as amended by Act XIV of 1896, that, after the issue of a notification applying the former Act to any tract of land, tenancies might be created by entries in a register being signed by the tenant. Prefixed to the register was a full statement of the conditions on which the land included in the different holdings is granted, and, by signing the subsequent entry relating to his own holdings, the tenant became subject to all these conditions whether they agreed with the provisions of the Punjab Tenancy Act or not. A simpler procedure was prescribed by Act V of 1912, the Colonization of Government Lands (Punjab) Act, which removed from the purview of the Tenancy Act all Government tenancies to which Act V of 1912 was made applicable.

219. Tenants-at-will.—The incidents of the tenures of tenants for a term of years and of yearly tenants, so far as they are not determined by contract, are described in Chapter II of the Land Administration Manual.

220. No inquiry made at settlement regarding status of tenants.—Section 37 of the Land Revenue Act is a bar to any settlement inquiry into the status of tenants. If a tenant entered as a tenant-at-will claims occupancy right, he must be referred to a revenue suit. No attempt should be made to show occupancy tenants under the different classes described in the present Tenancy Act (XVI of 1887), unless the particular class to which such a tenant belongs has been shown in a previous record or declared in a judicial proceeding.

*Mr. O'Dwyer's Settlement Report of Gujranwala, paragraph 196, and Mr. Talbot's Settlement Report of Jhelum, paragraph 118.

CHAPTER X. Preliminary Measures in connection with a Settlement.

221. Proper time for starting a settlement.—Much loss has been caused to the State with doubtful benefit to the people by the failure to re-assess districts promptly when the term of settlement expired. A settlement should ordinarily begin two years before the expiry of the period for which the existing settlement was sanctioned.

222. Preparing a district for settlement.—It was the aim of the reforms effected by Colonel Wace to provide the Settlement Officer at starting with an efficient staff of *patwaris* and *kanungos*, with maps and records corrected to date, and with accurate assessment data. This ideal has not yet been realized, but in the districts of which the last revision of settlement was completed in 1909, or a later year, it was found possible in consequence of these reforms having been in operation for the greater part of the period of the expired assessment considerably to abridge settlement operations. Special rules (paragraphs 43—7, of Standing Order 16), have been drawn up for the maintenance of the maps and records of those districts and it is hoped that their observance will result in the ultimate realization of Colonel Wace's ideal. But in the other districts of the province as they come under re-settlement some special measure of revision of records will be required, though the rules in paragraphs 35—42, Standing Order 16, which are applicable to those districts, should tend to simplify it. The methods at present in force of simplifying this special revision of records are described in Appendix XXI. There is some advantage in drafting to the district gradually during the 6 months preceding the commencement of settlement, the special establishment required for revision as the men become available from other settlements, for this ensures the men being on the spot punctually and starting work with some previous knowledge of local circumstances.

223. Financial forecast and settlement notifications.—A general re-assessment of any area can now be undertaken when the sanction of the Local Government has been obtained and a notification has been issued under section 49 of the Land Revenue Act of 1887. The application for sanction is accompanied by a forecast of the probable financial results of re-assessment prepared by the Deputy Commissioner of the district, or some other officer selected by the Financial Commissioner for the purpose. The orders regarding such forecasts are contained in the second and third of the settlement instructions of 1893 revised in 1914 (see Appendix I), and some suggestions as to their preparation will be found in Appendix II and in the rules framed under section 60 of the Land Revenue Act, as amended by Act III of 1928, in Part E of Appendix I. Usually the question whether a district will be re-assessed when the term of its settlement expires will be determined by financial considerations. But a preliminary report should not only deal with the gross amount, but also with the character

of the existing assessment, the suitability of its form to local circumstances, and the fairness of its distribution over estates. Cases may occur in which an assessment is so high, or so bad in form or distribution, as to require revision quite apart from the question whether re-assessment will yield any profit to the State commensurate with the cost of making a new settlement. Before the report is prepared the leading agriculturists and organizations of land-owners of the area concerned shall be consulted so far as practicable and it shall be noted in the report to what extent this has been done and what opinions have been elicited. The sufficiency of existing maps and of the other documents included in the records-of-right for practical revenue work, and, where they require correction, the possibility of carrying out the necessary measures by the ordinary district agency without the employment of a settlement establishment, should be noticed. Re-assessment may be ordered without a special revision of the record or *vice versa*, or it may be clear that it is desirable to combine these two operations. If re-assessment and special revision of the records are both necessary it is well that notifications under sections 49 (1) and 32 (1) of the Land Revenue Act should be issued simultaneously. Proposals for the additional establishment to be employed in connection with settlement operations will be framed in the Financial Commissioners' office.

224. Preliminary operations.—On taking up his duties a Settlement Officer will find it a good plan to make a rapid march through all parts of the area to be re-assessed in order to obtain a general idea of the lie of the country and the nature of the cultivation, the chief varieties of soil and irrigation, the suitability of existing assessment circles, and the character of the maps and records and of the staff responsible for their maintenance. As each tahsil is visited the assessment report of the last settlement should be studied, and a rough notion of the changes which have occurred since the previous assessment should be obtained from an examination of the tahsil and assessment circle revenue registers. At the same time the accuracy of the annual records and the state of the business connected with the attestation of mutations should be examined by himself and his principal subordinates. Great pains should be taken to dispose of all arrears of mutation work so as to make the first *jamabandis* prepared during settlement really accurate statements of existing titles. If this is done the record work connected with the new surveys which are made will be greatly simplified.

225. Matters for early decision.—There are five subjects which claim early attention and on which a Settlement Officer must ask for orders as soon as he feels himself able to report upon them. These are—

- (a) the extent to which re-measurement is required ;
- (b) the classes of land which should be recognized in the record ; ✓
- (c) the circles in which the estates should be grouped for assessment purposes ; ✓
- (d) the commutation prices to be used in the produce estimate ; ✓
an
- (e) the cycle of years which should form the basis of the produce estimate ✓

The Commissioner sends the reports with his own recommendations to the Financial Commissioner for orders.

It is unnecessary, and will probably be found inconvenient, to dispose of all these matters in a single report. The first two are the most urgent and should be dealt with together, the others may be reserved for a separate report or reports. The considerations which govern the question whether a new survey is required or not are noticed in Chapter XII, and the classification of land for assessment purposes in Chapter XIII. The XVIth Chapter of this work deals with the formation of assessment circles, and the subject of commutation prices is dealt with in Chapter XIX. The rules framed under section 60 of the Land Revenue Act bearing on these matters should be duly borne in mind.

CHAPTER XI. The Settlement Officer and his Establishment.

226. The Settlement Officer.—The Settlement Officer is a revenue officer charged with the duty of making a general re-assessment. While engaged on this task he is also responsible for the continuance and improvement of the regular work of the village record agency, and, when a notification directing the special revision of existing records-of-rights is issued, for the carrying out of the additional operations which such an order entails. He should so lay out his work that it shall fit in with the ordinary duties of the *patwari* and *kanungo* agency. It is important that during a settlement the usual routine of the revenue work of a district should be as little as possible interrupted. The Settlement Officer may be—

- (a) the Collector or Deputy Commissioner of the district,
- (b) an officer invested with most of the powers of a Collector, but working in subordination to the Collector of the district, who is ultimately responsible for the assessment and for the correctness of the records, or
- (c) an officer invested with most of the powers of a Collector and solely responsible for the assessment and record work.

Under present circumstances the third plan is, as a rule, by far the best. The advantage which would result from posting the future Settlement Officer to the district as Deputy Commissioner or Revenue Assistant for a year or two before the re-assessment begins is clear. But to unite the offices of Deputy Commissioner and Settlement Officer in one person is likely to be unfair to the work and injurious to the worker. It may become feasible to do so when the reforms introduced by Colonel Wace have borne their full fruit, if the assessment is carried out tahsil by tahsil. The second arrangement is very difficult to carry out in practice. Tact on the part of both the officers concerned may make the position endurable, but it is really a false one. The Deputy Commissioner cannot find time to make himself so fully acquainted with the details of the work of the settlement, and especially of the assessment part of it, as to become really responsible for the result, and it is not right that the officer to whose exertions any merits which the settlement possesses are due should not get the full credit for it.

227. Relations of district and settlement staff.—Where the Settlement Officer is neither the Deputy Commissioner nor under the orders of the Deputy Commissioner, it is essential that they should themselves act cordially together and insist on their subordinates doing likewise. Their respective spheres of work may be marked off to some extent, but each in his own sphere requires and has a right to look for the help of the other. Indians are quick to detect any want of harmony between their official superiors and steer their course accordingly.

228. Additions to district staff during settlement.—The special settlement staff usually consists of—

- (a) an Extra Assistant Settlement Officer who may also be Revenue Assistant of the district, and who in both capacities works under the orders of the Officer-in-charge of Settlement operations,
- (b) a Settlement tahsildar for each tahsil,
- (c) Settlement naib-tahsildars, each in charge of four or five *kanungos'* circles,
- (d) Settlement field and office *kanungos*, each field *kanungo* being expected to supervise about five survey parties.

If the district is a large one it is often necessary to have a Revenue Assistant working under the orders of the Deputy Commissioner as well as an Extra Assistant Settlement Officer. One or two extra tahsildars are sometimes appointed in the second year of Settlement operations, if the quantity of work turned out by the subordinate staff is such that the settlement tahsildars cannot keep up with it in their final attestation. The district tahsildars and naib-tahsildars are expected to co-operate in settlement work, and, where possible, should be given some definite share of the duty of supervision. The *patwaris* and *kanungos* of the tract under settlement are placed entirely under the control of the Settlement Officer. If the *patwari* establishment is strong enough to carry out efficiently the duties which fall to it in ordinary time it will not be increased simply because a settlement is in progress. It is an accepted principle of settlement policy that all work connected with the revision of land records including re-measurement, if that is found necessary, shall be done by the *patwaris*, and it is one of the Settlement Officer's principal duties to train them to do such work properly. Any *patwari* who, after fair trial, cannot learn to do it should be dismissed. A grant for temporary establishment is usually included in settlement budgets. But it must not be used so as to relieve *patwaris* of any part of their proper duties. It is available for providing allowances to *kanungo* and naib-tahsildar candidates under training and salaries for a limited number of temporary clerks, colourists, etc., as well as for paying extra settlement *patwaris*. Great care must be taken to employ as few men as possible of the last class (see paragraph 247). No extra *kanungos* must be appointed and paid from the grant for temporary establishment without the sanction of the Commissioner. Further instructions about the temporary establishment will be found in paragraphs 19—23 and 26—29 of Standing Order No. 16.

229. Business assigned to Settlement Officers.—The business under the Tenancy and Land Revenue Acts assigned to Settlement Officers is detailed in Appendix VI. Questions may occasionally arise as to the division of work between the Deputy Commissioner and the Settlement Officer which the instructions in that appendix do not cover. These it will generally be possible for the two officers concerned to settle for themselves. The rule of decision should be as far as possible to maintain the ordinary course of revenue administration and to avoid weighting the Settlement Officer with any duty which is not essential to the progress of his special work. The fact that a re-assessment of his district is being made

is not intended to relieve the Deputy Commissioner of duties other than those connected with assessments and village records.

230—231. Cancelled.

232. Judicial Powers of Settlement Officers.—The judicial powers of Settlement Officers, once so extensive, are now very limited.* It is true they are invested with all the powers of a Collector under the Tenancy Act, but, unless the Financial Commissioner otherwise directs, the exercise of these powers should be restricted to the disposal of the business noted in Appendix VI. The only judicial function which a Settlement Officer will therefore as a rule exercise is the hearing of suits in which the question at issue is the alteration of the rent of a holding and suits relating to the emoluments of *kanungos*, *patwaris*, and village headmen. Suits of the latter class are very rare. By Chapter XI of the Land Revenue Act the Local Government is empowered to invest a Settlement Officer with exclusive jurisdiction as regards all or any specified classes of suits relating to land, and also, if it thinks fit, to divert the ordinary course of appeal and revision as regards his orders and decrees in such cases, from the superior civil to the superior revenue courts. But so far no use has been made of these provisions.

233. Revenue and magisterial powers of settlement staff.—Settlement Officers are invested with the powers of a Collector under the Land Revenue Act, except those relating to the collection of revenue. In the exercise of their powers as judicial and revenue officers they are not subject to the control of the Collector of the district. When Assistant Settlement Officers are appointed the same powers are conferred on them to be exercised subject to the control of the Settlement Officer. Extra Assistant Settlement Officers are appointed Assistant Collectors of the 1st grade and, as such, have powers under both the Land Revenue and Tenancy Acts.† It is often convenient to give them the special powers referred to in section 77 (4) (b) of the latter Act in order to enable them to hear rent enhancement cases. All Settlement tahsildars and *naib-tahsildars* are as such Assistant Collectors of the 2nd grade under both Acts.‡

Settlement Officers are invested with the powers of 1st class Magistrates. It may be convenient to give similar powers to Extra Assistant Settlement Officers, if they have sufficient experience of criminal work. The powers of a Magistrate of the 3rd class have been conferred on every Settlement tahsildar "permanently or temporarily employed in the work of settlement." The powers are to be used "only for the purpose of disposing of complaints brought by or against members of the district and settlement.....establishments working under their orders."§

234. Duties in connection with suspensions.—The duties of the Settlement Officer under Chapter V of the Land Revenue Act comprise not only the general re-assessment of the district but also the carrying out of all special assessments such as the yearly revision of the demand in villages

*See Appendix IV.

†Section 75 (1) of Act XVI of 1887.

‡Punjab Government Notification No. 337, dated 11th March 1905.

§Punjab Government Notification No. 1108, dated 13th September 1904.

subject to river action. Although the notification which confers on him the powers of a Collector specially excepts those powers which may be exercised under Chapter VI of the Act, his responsibility in connection with the collection of the land revenue is still considerable. His daily work enables him to judge better than any one else when a suspension of the whole or part of the demand is required owing to failure of crops. It is his duty to report all such cases to the Deputy Commissioner, and the latter is bound to call on him for a report on any case that comes under his own observation, and cannot set his recommendations aside without reference to the Commissioner.

235. Powers as regards headmen and zaildars.—The appointment of village headmen rests with the Settlement Officer, otherwise he might not be able to get that ready assistance from them which is essential for the prosecution of his work. Their help is specially necessary to procure the attendance of right-holders, whose presence is required in connection with the attestation of mutations or with the making of new maps or records. As far as possible formal proceedings should be avoided in such cases, but in the event of recusancy the provisions of section 149 of the Land Revenue Act can be put in force. The Settlement Officer is empowered to dismiss headmen for neglect of duty or disobedience of orders when the duty or orders relate to business controlled by the Settlement Officer. Before dismissing a headman he should consult the Deputy Commissioner, but he is not bound to follow his advice. Similarly, when the Deputy Commissioner proposes to dismiss a headman for misconduct unconnected with settlement work, he should consult the Settlement Officer before passing final orders. The Settlement Officer should be very careful to thwart any attempt on the part of headmen to plead occupation in settlement work as an excuse for neglecting their ordinary duties or for delay in obeying orders addressed to them by the district authorities. *Zaildars* are appointed and may be dismissed by the Deputy Commissioner, but he is bound to consult the Settlement Officer before filling up vacancies. He need not accept the Settlement Officer's recommendation, but when the merits of rival candidates are being weighed, it is right that the aid afforded by them in settlement operations should be considered. It may also sometimes be convenient to defer the filling up of an appointment, if a revision of existing *zaildari* arrangements will probably be made before the close of the settlement.*

The strength of the additional staff required when a general re-assessment of a district is undertaken will depend on the amount of revision necessary to put the records of rights and the revenue registers in a satisfactory condition, and on the question whether re-measurement must be undertaken in a large number of estates. As far as possible, these questions should be settled before re-assessment operations are started. But, if experience proves to a Settlement Officer that the amount of work required was under-estimated and that the staff provided is insufficient, he should not hesitate to propose that it should be reinforced. It is the worst possible economy to attempt to struggle on with an establishment too weak for the duties it is expected to perform.

*As regards duties imposed on Settlement Officers, see also Chapter XXXIV.

236. Settlement training of revenue officials.—The rules under which Assistant Commissioners, Probationary Extra Assistant Commissioners, naib-tahsildars and accepted candidates for the post of naib-tahsildar and *kanungo* may be deputed for settlement training are noticed in the Land Administration Manual. The object is to give these officers and candidates a thorough acquaintance with survey and record work and in the case of Assistant Commissioners a knowledge of the principles and practice of assessment. Full instructions for the training of Assistant Commissioners are contained in Standing Order No. 8. If officers and candidates are properly instructed at the outset they should be fit to be entrusted with a share in the work of supervision suited to their standing and capacity before the period of their deputation comes to an end.

237. Supervision of survey and record work.—At the beginning of a settlement it is essential that the Settlement Officer should give a great deal of personal attention to the oversight of survey and record work. Even if he is fortunate enough to have at the outset a fairly efficient staff it will only turn out good work under strict supervision and a discreet use of rewards and punishments. A regular system of inspection in the field and in the village must be organized, and care must be taken that every branch of the work receives its due share of attention. Neat and accurate maps are very important, but after all, small errors in survey harm individuals less than incorrect entries in a *jamabandi*. Great patience must be shown at first with unskilful workers who are willing to learn, but patience must not degenerate into the weakness, which sacrifices public interests because it is disagreeable to punish, and finally, if they prove incorrigible, to get rid of inefficient instruments. When all grades of officials from the Extra Assistant Settlement Officer downwards have realized that a high standard will be insisted on, and that the Settlement Officer is able to put his finger on the weak points of their work, self-interest will produce the result desired. The credit of the higher officials in the eyes of their subordinates must be carefully maintained, and when rebuke is required, it should be administered privately. When the record work is thoroughly organized the Settlement Officer will be able safely to hand over the supervision of it largely to the Extra Assistant Settlement Officer and concentrate his attention on assessment.

238. Cancelled.

CHAPTER XII. Survey.

239. Settlement work based on accurate field survey.—In order to carry out either of the two branches of his work, the framing of a record of rights or the making of a fair assessment, the Settlement Officer must have an accurate map of each village showing the position and boundaries of every field. Such a map is known as the *shajra kishthwar*. He also requires a record of the area of each field, which is easily calculated when its shape and linear dimensions are known, and for assessment purposes it is expedient to note at the time of measurement the class or classes of land which each field contains.*If no field map exists, the Settlement Officer must make one; if the existing map is defective, he must consider whether it can be corrected without an entirely new survey.

240. Separate field map for each village.—There is a separate assessment and a separate record of rights for each estate or *mahal*. But the unit for purposes of survey is not the estate, but the village or *mauza*. These terms have already been explained. The distinction between them introduces no complication into settlement work, for as a matter of fact the things which they denote are in the Punjab almost invariably one and the same. Occasionally a block of land or some scattered fields belonging to one village are enclosed within the boundaries of another village. Such fields should be measured along with the village in which they are included, but given an independent series of numbers.

241. Survey marks.—In order to indicate clearly the limits of each estate masonry platforms (*sihaddas*) are built at every point where the boundaries of more than two estates meet (Land Revenue Rule 33). At every angle on the boundary line between two trijunction platforms, mud pillars (*burjis*) are erected (Land Revenue Rule 32). Before the measurement of any estate is undertaken the village headmen should be required to put every platform in a proper state of repair and to replace any pillar that may have been destroyed. Chapter VIII of the Land Revenue Act gives the Settlement Officer power to enforce the erection and maintenance of these and any other survey marks that may be required. The cost of special survey marks set up to facilitate measurements, *e.g.*, at regular intervals on a base line or to mark the corners of squares (paragraph 250) is a Government charge.

242. Fields and kilabandi.—A field is a parcel of land to which a separate number is assigned in the map. The fixing of the limits of fields for survey purposes is a question to be decided on grounds of convenience, the chief matter for consideration being the use to be made of the maps in the half-yearly crop inspections. Usually any parcel of land lying in one spot in the occupation of one person or of several persons jointly, and held under one title, should be treated as a single field. Occasionally where land is rich and let in small plots the survey numbers under this rule will be very

*See Chapter XIII.

numerous. This cannot be helped, for no clear record of tenancies and rents can be kept up if parcels of land tilled by different tenants are not treated as separate fields. But where the rule works in an opposite direction, and, if strictly followed, would result in the areas included in single survey numbers being very large, it is subject to important exceptions. Several plots of land owned by a single proprietor, which are always recognized as separate fields having limits indicated by more or less permanent ridges or hedges, and being known perhaps by distinct names, may at the time of measurement be included in a single tenancy. There is no object in treating these as one field. Or, again the area occupied under one title may be so large that the record of crops, harvest by harvest, will be rendered easier if it is broken up into several survey numbers. This is especially true in the case of fields irrigated by a perennial canal. If they are large and irregular in shape, the assessment of water rates by officers of the Irrigation Department becomes much more difficult. Accordingly on new canals in the west of the Punjab each survey square in Crown lands has been divided into 25 small squares, known as *kilas*, each occupying a fraction over an acre. Each *kila* forms a field or survey number.* *Kilabandi* has been introduced to a large extent even in privately owned estates on the Lower Chenab and Lower Jhelum Canals. On the newest canals the squares have been replaced by rectangles containing exactly 25 acres, so that the *kila* is the equivalent of an acre. On old canals it is difficult to induce landowners to accept *kilabandi*, which involves the breaking up of old field boundaries. But the main advantages of *kilabandi* can be secured if in mapping canal-irrigated estates care is taken to make the fields of moderate size, and, as far as possible, of regular shape. As a rule a canal-irrigated field much larger than an acre is inconvenient. In the case of extensive blocks of common waste land each survey square is usually treated as a separate field. It is not essential that a survey number should be wholly cultivated or wholly uncultivated, or that it should consist entirely of one soil or class of land. But if the uncultivated land is of any extent it is convenient to treat it as a separate number, and if the line of division between two soils or two classes of cultivated land is clearly marked and of a fairly permanent character, it is better to put land on either side of the line in different fields, even though it is in the cultivating occupancy of a single person. On the other hand, care should be taken not to multiply survey numbers merely on account of the presence on the ground of ridges thrown up for convenience of cultivation or irrigation. Where this is done record work is needlessly increased. Section 101 of the Land Revenue Act empowers any revenue officer engaged in the framing of a record of rights to define the limits of any field as to which a dispute has arisen.

243. Measures of length and area.—The simplest way of measuring land is by pacing. When a man in walking steps out first with his left foot, the pace or *kadam* is the distance between the heel of the right foot in its original position and the heel of the same foot after it has been advanced in front of the left foot to make the second step. A *kadam* is the usual unit of measures of length and a square *kadam* the unit of measures of area. In the east of the Punjab, where the *bigha* is the local measure, the

*See Appendix XIV.

square *kadam* is known as the *biswansi*; in the west, where the *ghumao* is employed, it is known as the *sarsahi*. Twenty *biswansis* make a *biswa*, and twenty *biswas* a *bigha*. Nine *sarsahis* make a *marla*, twenty *marlas* a *kanal*, and eight *kanals* a *ghumao*. The *bigha* of the Western Punjab is one-half of a *ghumao*. As the average height of a man in different localities varies greatly, it is not surprising that the local measures in use were found to be far from uniform. The variations have been reduced, but not abolished, in our settlement surveys. The *bigha* employed in some settlements in the east of the Punjab is $\frac{5}{4}$ ths of an acre.* It is usually known as the *kachcha bigha*, to distinguish it from the old Mughal measure known as the *shahjahani* or *pakka bigha*, which is exactly three times as large. Where the *shahjahani bigha* is the unit of area the linear measure is not the *kadam*, but the *gatha* of 99 inches. The *kadams* in use vary from 54 to 66 inches, the latter being the most usual length. It is also the most convenient, for, where it is employed, the *ghumao* is exactly equal to an acre. Full details of the land measures officially recognized in different districts will be found in Financial Commissioners' Standing Order No. 16.

244. Calculation of field areas.—The calculation of field areas depends on the simple fact that the numbers of *kadams* on two sides of a rectangular figure, one of which is perpendicular to the other, multiplied together will give the number of square *kadams* (*biswansis* or *sarsahis* as the case may be) which the figure contains. It follows that the area of any triangle can be found by multiplying the number of *kadams* in its base by the number contained in a perpendicular dropped on to the base from the opposite angle, and halving the result. However irregular the shape of a field may be, so long as its sides are straight or only slightly curved, there is no difficulty in finding its area, for any figure of this sort can be divided into triangles.

245. Topographical and cadastral surveys.—There are two surveys with which a Settlement Officer has to concern himself, the topographical survey made by the Imperial Survey Department and the cadastral or field survey made by the *patwaris*. The second is indispensable for his work, the first is chiefly useful to him as a means of testing the accuracy of the second. The methods used in both cases are scientific. The processes followed in the second are, of course, much simpler than those employed in the former, but experience has proved, that, properly applied, they are sufficient to secure a degree of accuracy sufficient for all the purposes for which revenue officials employ village maps. The Imperial Survey deals with villages as a whole, mapping their boundaries and showing the main topographical features, such as the homestead or *abadi*, roads, canals, and large sheets of water. The limits of the cultivated, culturable, and barren land have also sometimes been indicated. The cadastral survey marks on the village map the boundaries of every field, and by means of it the areas shown in the *jamabandi* are calculated.

246. Field survey in Punjab not supervised by officers of Survey Department.—In some parts of India the topographical and the field survey are both under the charge of the Imperial Survey Department. It has more than once been proposed to extend this system to the Punjab,

*Selections from the Records of the Financial Commissioner's Office, New Series No. 24.

but the opinion of experienced revenue officers has always been opposed to any change of this sort,* and the existing system is so simple and, with the exercise of ordinary care, gives such satisfactory results, that there is small likelihood of its being given up. In fact in some cases the latest topographical maps of the Punjab districts have been made up by the Imperial Survey Department by piecing together reduced copies of the field maps after their accuracy had been tested by making a traverse connecting certain fixed points marked in some permanent way on the ground.† It is very desirable but not essential that such a traverse should be made by the Survey Department before the Settlement Officer begins his field measurements. If he is furnished with tables showing the distances between a large number of fixed points, the accuracy of which has been gauged by rigid scientific processes, he possesses a very valuable means of judging of the correctness of his own work. The methods of testing the cadastral survey by the help of the topographical survey are noticed in Appendix VII. An absolute agreement between the results of the two surveys is not to be expected. Where a discrepancy between them, large enough to deserve notice, is discovered, it is not safe to conclude that the field measurements are at fault. But it is a reason for testing them rigorously and coming to a definite conclusion on the subject. A description of the methods employed by the Survey Department and the maps prepared will be found in Selection No. 30 (New Series) from the records of the office of the Financial Commissioners, Punjab.

247. Employment of amins.—Men acquainted with the simple methods used in field measurements and known as *amins* have sometimes been employed in settlement surveys on the ground that *patwaris* lacked the skill which would enable them to do the work rapidly and accurately. The plan is a thoroughly bad one, for it deprives the *patwaris* of the opportunity of learning an essential part of their work, and at the same time increases the danger that the survey may be made a means of extortion. The *patwari* has local knowledge which saves him from many mistakes, and he has a far greater interest in making his work accurate than any temporary hand can have, who is only troubled by errors which happen to be found out. The plan of employing *amins* was early condemned in the Punjab.‡ It was revived on a large scale in some later settlements. It is now considered essential that every *patwari* should measure with his own hands the greater part of his circle. When additional surveyors are employed they should, as far as possible, be accepted candidates for the post of *patwari*.

248. Early field surveys.—In the first regular settlements the survey of a village consisted of two distinct stages, the preparation of a boundary map (*naksha thakbast*) after all disputes as to the limits of the village land had been settled, and the making of a field map or *shajra kishtwar* and a *khasra*. The latter was a register, showing, in respect of each field, its number

*See Punjab Revenue Proceedings No. 4 of September 1873, and No. 1 of September 1883.

†See joint memorandum by the Surveyor-General and Colonel Wace, Commissioner of Settlements, in Selections from the Records of the Financial Commissioner's Office, New Series, No. 26, also paragraph 51 of the Report of the Indian Survey Committee, 1904-05, Vol. I.

‡Selections from the Records of the Punjab Administration, Old Series, No. XI, and Financial Commissioner's Circular No. 86 of 1855. See also Financial Commissioner's Standing Order No. 16, paragraphs 18 and 19.

in the map, the names of its owner and of the person who cultivated it, its linear dimensions and area, the soil or class of land which it contained, and the crops growing in it at the time of measurement. The *shajra* is described in Mr. Thomason's Directions as "a rough plan of the village." and in paragraph 17 of Mr. Barnes' Report, dated 13th December 1852, on a "new system of field measurement in the Punjab"* as "nothing but a rough eye sketch laid down without rule, scale, or compass. It might or might not present an approximation to the actual contour and dimensions of the village area, but the only security for such results were the practised habits and correct eye of the *amin*."

249. "Plane-table" system of survey.—No field survey can be worth much which is not based on a skeleton traverse of fixed points on the surface of the ground whose direction and distance one from the other have been accurately determined. This requirement was met with some measure of success in the plan devised by Mr. Blyth about 1852, and first put into practice in the settlement of the central districts of the Punjab.† Mr. Blyth applied his practical experience of the methods of the Survey Department to the working out of a scheme resting on a scientific basis, and yet simple enough for *patwaris* to follow. By the use of the plane-table compass, and sighting rod, maps drawn to scale in which the fields were plotted with a considerable amount of accuracy were produced. The new plan, known as "the Punjab" or "the plane-table" system was speedily adopted in the United Provinces, and gradually improved in both provinces till it became a very effective instrument for the making of the field maps. It is only possible here to refer very briefly to the main features of the plane-table system of survey. For details Chapter V of Mr. Vincent Smith's Settlement Officers' Manual for the United Provinces, and Chapter X and Appendix I of the Punjab Manual of Land Measurement—Edition of 1917—may be consulted.‡ The area of a village was cut up into triangles, and the framework on which the field survey was built up consisted of the straight line forming their sides. The triangulation was effected by taking up convenient points all round the boundary, but not necessarily on it, and connecting these with one another and with other fixed points in the interior of village. The distance between the various points was carefully chained, and their relative bearings were fixed by the sighting rod, the true north and south having first been determined by means of the compass. Starting from some station on or near the boundary the surveyor worked all round the latter, laying down his triangles as he proceeded. It was possible to apply efficacious tests to the work as it proceeded, but the final test of it was the way in which the circuit closed; in other words, its correctness was proved if the last triangle of the series fitted properly into its place, its dimensions as scaled on the map corresponding with the actual dimensions on the ground as determined by chain measurement. The boundary line was laid down by means of offsets from the bases of the nearest triangles, and the accurate plotting of fields was ensured by marking on the ground

*Selections from the Records of the Punjab Administration, Old Series, No. XI, and Financial Commissioner's Circular No. 86 of 1855.

†Selections from the Records of the Punjab Administration, Old Series, Nos. VII and XI.

‡For older instructions on the subject see the second Chapter of the Vernacular *Dastur-ul-ami Patwarian* published in 1876.

and on the map the point where the boundary of any field intersected the side of any triangle. A common fault of maps prepared on this system is that the boundaries of adjoining estates do not interlock.

250. Square system of measurement.—This plan has been superseded in plains districts by the square system of measurement introduced by Colonel Wace in 1888, an excellent account of which will be found in Mr. Francis' "Manual of Land Measurement for Patwaris." The area of a village is now divided into squares of equal size, the skeleton traverse being built up on a square usually of 200 *kadams* laid down with great care somewhere near the centre of the village. In making this square the first thing to do is to measure with the utmost accuracy in open ground a base line of 200 *kadams*, represented by a 5-inch line on the map, the scale commonly adopted being one inch to 40 *kadams*. The ends of this line are marked by small masonry pillars, which should be well built and carefully preserved, or by stone or concrete blocks. This system is better suited to *patwaris* than the triangulation plan, for it offers less temptation to fudging. If the first square is accurately laid down, it is not difficult to ensure the correctness of the whole traverse, and, as a matter of fact, *patwaris* with proper oversight perform this part of their work admirably. The boundary is laid down by means of offsets from the nearest square, and the sides and diagonals of squares are utilized in connection with the plotting of fields in the same way as the sides of triangles in the plane-table system.

251. Common base line for a large number of estates.—In the case of estates near a river the plan introduced by Mr. Francis of having a common base line may be usefully adopted. Where possible there should be a corresponding base line parallel to the first on the opposite bank.* By this device the difficulty of relaying boundaries which are liable to be obliterated is diminished. The full benefits of the plan are secured where the boundaries of the estates which face each other on either side of the stream are fixed. In the last settlement of Peshawar the plan of having common base lines running due east and west and north and south for the whole district was adopted.† Any help which officers of the Imperial Survey Department can give in laying down or checking base lines should be welcomed. It is beyond the capacity of a revenue staff to lay down a base line for any great distance which will not show considerable divergence from the true direction. If for any special reason a long line is required, it is better to lay it down in separate short sections, say, of about two miles each, so that the errors in one section may not be continued in the next. In recent settlement surveys of several riverain tracts much valuable assistance has been obtained from plotted sheets supplied by the Survey Department. They show in correct relative position certain convenient points (*chandās*) or corners of squares which have been fixed by a skeleton traverse survey run along or over the tract bordering both banks of the rivers concerned. Identical orientation of squares on either side of it can thus be secured. The system is one which should be utilized wherever possible.

*See Casson Walker's Settlement Report of Lahore, paragraph 23.

†See Dane's Settlement Report of Peshawar, paragraphs 37-38.

252. Survey work in Hissar and hill tracts.—In the settlement of the Hissar district, carried out between 1887 and 1892, the field measurements were based on a somewhat elaborate traverse made by the Survey Department, but this plan has not been followed in other plains districts, except in the case of riverain tracts as noticed in the last paragraph, as it is found that the squares laid down by the *patwaris* furnish an accurate framework for cadastral surveys. But in hilly tracts the square system is impossible. Recourse has, therefore, to be had to a modification of the plane-table system, and no great accuracy can perhaps be looked for unless the *patwari* is supplied with mapping sheets on which the position of several conspicuous points has been marked by the Survey Department.* In the tracts under reference, and possibly in others, an increasing amount of assistance of this kind will, it is anticipated, be required as time goes on, from the Survey Department. Plotted sheets showing survey marks fixed and traversed by that Department were supplied in the Kangra district for the purpose of facilitating settlement measurement and mapping. In all Settlements for which such plotted sheets are supplied, three traverse points in each estate should be marked with stone pillars under the orders of the Settlement Officer. It may be possible to utilize tri-junctions as traverse points and thus to reduce the expense of laying extra pillars.

253. Re-measurement avoided where possible.—It is the policy of Government to get rid as soon as possible of the necessity of re-measuring villages at settlement, and one of the first tasks which a Settlement Officer must take in hand is to decide to what extent re-measurement is required. The field maps should be not only accurate enough for revenue purposes, but also capable of being utilised after reduction for topographical purposes by the Survey Department.† Unless the old maps were really accurate when made it is a mistake to attempt to retain and correct them. When really good maps have once been provided no re-survey should hereafter be necessary in tracts unaffected by the action of streams or the spread of ravines, unless great extensions of cultivation and changes in field boundaries have taken place by the introduction of canal irrigation.

254. Testing of old maps.—It will be well to note some of the tests which can be applied to the old plane-table survey maps. One of the best is to see whether the *patwari* with the map in his hand can or cannot register the crops with ease and accuracy. If he finds it impossible or very difficult to make it the foundation of *girdawari* work, it is better without more ado to prepare a new map on the square system. Even though the old one is drawn pretty accurately to scale, its correction would under such circumstances take a long time, and it is better to have a really good map as the

*For hill measurements see Appendix I to the Punjab Manual of Land Measurement, Edition of 1917.

†In Peshawar Mr. L. W. Dane reduced his own field maps, which were on a scale of 24 inches to the mile, to the scale of 4 inches to the mile. One copy of the reduced map of each estate was filed as an index to the *shajra*, another was put in the village note-book. The reduced village maps were combined into assessment circle maps. Copies of these circle maps containing all the topographical details required by the rules were sent to the Survey Department to be utilised in preparing a new survey map of the district (Dane's Settlement Report of Peshawar, paragraph 38). Compare paragraph 2 of the Government of India, Revenue and Agricultural Department, No. 352—365-2, dated 11th February 1899, in Punjab Revenue Proceedings No. 84 of February 1899.

basis of future operations than a patchwork of old and new measurements. If the old map was incorrect from the first to any serious extent, it is absurd to try to mend it, and re-survey is inevitable. In order to make up his mind on this point a Settlement Officer can apply several tests. The maps of adjacent villages should be compared to see if the boundaries dovetail, and test lines can be drawn across the map connecting well marked points, such as tri-junction platforms, and the results of chaining along these lines noted. If the total length as chained and as read off by scale from the old map, and also the distances between the field intersections compared in the same way, agree very closely, and the result of carrying the chain right and left along sides of some of the fields traversed by the test line is satisfactory, the map is probably a good one. Or squares may be laid down on the ground and marked on the map, and the tests noted by Mr. Francis in Appendix III of his Manual applied.*

255. Boundary disputes.—Section 101 of the Land Revenue Act gives a Settlement Officer power to define village boundaries. Fortunately boundary disputes are now rare except in the case of estates subject to river action. The subject of boundaries and of riverain custom is dealt with fully in the Land Administration Manual.† A Settlement Officer must remember that in the case of a boundary dispute between a British village and an estate lying within the territory of a Native Chief, he can only investigate and report his opinion to the Commissioner of the division. Recent orders of Government require that—

“Where a regular settlement is in progress along the boundary line of a Native State due intimation of the fact will be given to the State by the Commissioner of the division in which the operations are being carried on. This intimation will be to the effect that survey operations along the boundary will be presently undertaken, and that the Settlement Officer will give due notice of the date when the measurement work in each estate will actually approach the boundary, and it will contain a request that the necessary orders may be issued to the proper State officials to be present both when measurements are being made, and when it is desired to attest the boundary resulting from these measurements. It will also request that the names of these officials may be at once intimated so that the Settlement Officer may correspond direct with them in all unimportant matters connected with the subject in question. During the first stage of operations above-mentioned it will usually be sufficient for the State *patwari* or *kanungo* or other subordinate revenue officer to be present. If during the progress of this stage it is necessary for the settlement officials to extend their work across the accepted boundary line, the Settlement Officer must first intimate the necessity to the State and obtain its assent, unless the work is done with the assent and in the presence of the revenue officials of the State. On the occasion of the actual attestation of the boundary an officer corresponding to the rank of tahsildar or Extra Assistant Commissioner should be deputed by the State, and in any special case in which the Settlement Officer himself may think it desirable to be present an official of suitable rank should

*See also Appendix XXI.

†Land Administration Manual, Chapter XII.

be sent to meet him. The procedure to be followed thereafter will be the same as that laid down in paragraphs 2 and 3. "

The procedure referred to is as follows :—

" If an agreement be arrived at it will be carefully recorded by the revenue officials of the British district in the necessary papers which should always include a map showing the accepted line. The finding and the map should be attested by the officials on both sides. In cases in which no agreement can be arrived at by the officials making the local enquiry the British official will record his own finding and the reasons for it, and will illustrate it with such maps as may be necessary. He will also ask the Native State official for a copy of the finding arrived at by the latter, and, if this is furnished, the British official will add it to his file, and will at the same time supply a copy of his finding to the Native State official. In every case, whether an agreement has been arrived at or not, the proceedings will be submitted to the Commissioner. The Commissioner will make any enquiries which he may deem necessary from the British authorities and from the Native State, and, if the dispute is between a village or villages in his division and in a Native State under his political control, will pass orders in the case. If otherwise, he will report to Government what boundary he considers should be fixed, forwarding a copy of his report to the Deputy Commissioner and to the proper officer of the Native State concerned. It will be open to the Darbar to make any representation which it may choose to prefer to the Punjab Government on the subject of this report, if it should consider it necessary to do so, but such representation should be made within sixty days of receiving the report, in order that a final decision upon the matter may not be unduly delayed. Similarly, the Deputy Commissioner will during the same period, if he thinks it necessary to do so, make any representation which he may consider necessary through the Commissioner. If neither the Native State nor the Deputy Commissioner take action as above indicated within sixty days of the date on which the Commissioner's report is received, it will be taken that the boundary proposed by the Commissioner is accepted, and the matter will be held to have been finally settled."*

256. Procedure in case of complete re-measurement.—The existing instructions as to the procedure to be followed by *patwaris* when a complete re-measurement of a village takes place will be found in Appendix VII. The directions given there as to soil classification should be compared with the remarks on the subject in the next chapter.

257. —Cancelled.

*Punjab Government Circular No. 25, paragraphs 3 and 4.

CHAPTER XIII.—Classes of Land and Soils.

258. Soils and classes of land.—The knowledge of soils which a Settlement Officer should possess must be the fruit of close and constant observation. But as an aid to the understanding of what he observes or hears from the people he will find the 3rd Chapter of Moreland's "Agriculture of the United Provinces" useful. Soils differ naturally one from another in respect of their mineralogical and chemical composition, and (what is often more important in a country of scanty or capricious rainfall) in respect of the mechanical arrangement of their component parts. Thus we have the broad classification of clay, loam, and sand. They are also distinguished by adventitious differences as irrigated and unirrigated, manured and unmanured, *dofashi* and *ekfashi*. It is best to use the word "soils" only to denote varieties resulting from the inherent qualities of the land and to describe varieties due to adventitious qualities as "classes," but this distinction is not always observed. When the differences, whether natural or adventitious, are so great as to cause a marked inequality of renting value, their recognition in the record is essential both for assessment purposes and for the proper distribution of the demand over holdings. A Settlement Officer must make up his mind at an early stage of his operations what classification of land he will adopt.* Till this is decided the field entries in the *khatauni* must remain incomplete.

259. Classes of land.—In a country of small rainfall the most important division of land into classes is that founded on the source from which the moisture required for the growth of the crops is derived. Thus land is classified as—

- ✓(a) *barani*-dependent on rainfall;
- (b) *sailab*-flooded or kept permanently moist by rivers;
- (c) *abi*-watered by lift from tanks, *jhils*, or streams. This term is also applicable to land watered from springs;
- (d) *nahri*-irrigated from canals. Where a Government canal and small private canals exist in the same district the land served by the former is sometimes distinguished as *shah nahri*;
- (e) *chahi*-watered from wells. The term is sometimes sketched so as to include irrigation from *jhalaras* erected on the bank of a stream. It is better to describe land dependent on *jhalaras* as *jhalaria* or *abi*.

The first two classes fall under the general head of unirrigated, and the last three under that of irrigated land.

260. Limits of *chahi* and *nahri* lands.—All land should be recorded as *chahi* or *nahri* which is watered by a well or canal from time to time in the ordinary course of husbandry. The limits of well or canal irrigation can

*See paragraph 224.

be fixed by the indications on the ground, and especially by the evidence of the water channels, and if any doubt remains, an examination of the entries in the crop inspection registers for a few years will solve it. Much of the land recorded in the *khatauni* as *chahi* or *nahri* is not irrigated every year. There are some parts of the province where the whole area attached to a well yields at least one irrigated crop in each year. But in many tracts the whole of the land for the protection of which a well has been sunk cannot be watered annually. It is sometimes found, for example, that the regular practice is to irrigate one-half of the land attached to a well in one agricultural year and the other half in the following year. And where the average rainfall is fairly large, but subject to great variations from year to year, the extent of irrigation fluctuates to an extraordinary degree with the character of the seasons.

261. Classes based on use of manure in course of husbandry.—Manured land has sometimes been treated as a separate class under the names of *niai* or *gora*. The latter term was imported from the United Provinces, and properly denotes the block of land lying immediately round the village site, which is often the only part of an estate that is regularly manured. In the eastern districts the *gora* land is usually occupied by wells, and there is much double cropping. In some of the districts north of the Salt Range, where it is as a rule unirrigated, it is known as *lipara* or *bari*. *Dofasli* or double cropped land has in a few settlements been regarded as sufficiently distinct to require a separate rate. The term *dofasli* does not imply that the land yields every year either two crops or cane, which occupies the ground for ten or eleven months and may be considered equal to two ordinary crops; it merely indicates that it often bears two crops in a single agricultural year (*kharif*—*rabi*). The use of the word *dofasli* may give rise to confusion and misapprehension, and where lands of the same class (e.g., *chahi-barani*) have to be sub-divided with reference to the number of crops annually raised, it is best to mark the difference by numbers, as *barani* I, *barani* II, or to employ the local term, if any, by which these sub-divisions of classes are described. In a few of the settlements made between 1880 and 1890 a more elaborate classification based on the course of husbandry was superadded to that founded on the presence or absence of artificial means of irrigation. The terms employed were *dofasli*, *ekfasli*, *hari* and *sawani*. The first has already been explained. *Ekfasli* was used to describe land tilled according to the familiar rotation under which a spring crop in one agricultural year is followed immediately by an autumn crop, and the land then lies fallow for a twelve-month. Experience has shown the advantages of this system for unirrigated land in upland tracts which enjoy a fair rainfall. *Hari* and *sawani* mean land devoted respectively to the production of *rabi* and *kharif* crops. Little use was made of the above classification for assessment purposes, and it is no longer employed.

262. Soils.—The first Punjab Settlement Officers brought from the United Provinces the distribution of soils into *dakar* or *matyar* (clay), *rausli* (loam), and *khur* (sand), and they found this or some such simple Punjabi classification as, for example, *rohi*, *maira* and *tibba*, sufficient for their purposes. *Niai* was sometimes treated as a separate class, and distinctions founded on the presence or absence of irrigation or inundation were

recorded, though not always, under the names now in vogue. The natural soils with the addition, perhaps, of *mai*, formed sub-divisions of the classes based on the presence or absence of irrigation. Some officers found even this amount of elaboration useless when they came to frame revenue rates, and two of the best of the early Settlement Officers, Sir Richard Temple in Jullundur and Mr. Philip Melvill in Hoshiarpur and Ambala, rejected all soil distinctions, and simply classed land as irrigated or unirrigated.* In some of the settlements made between 1870 and 1880 a minute classification of soils under their local names was attempted, those supposed to be of nearly equal value being grouped together for assessment purposes. Thus in the Nawashahr Tahsil of Jullundur Mr. Purser recorded as many as twenty *barani* soils which he arranged in three classes, for each of which a separate revenue rate was proposed. Colonel Wace was impressed with the futility of recording distinctions of which no practical use was made, and he was anxious that no elaboration should be admitted into settlement procedure which would afterwards increase the difficulty of maintaining the *patwari*'s annual records and returns. Accordingly, when Financial Commissioner, he issued instructions, the effect of which has been that the use of soil distinctions has been very generally abandoned, and Settlement Officers have confined themselves to a record of the classes based on the presence or absence of the several kinds of artificial irrigation or river flooding.

263. Arguments against recognition of soil distinctions.—

The arguments put forward in favour of such extreme simplicity are as follows. In a great part of the province the rainfall is so scanty and capricious that water is everything and soil nothing. The best land is of small value without the existence of artificial means of irrigation or advantages of position on the bank of a river or in a hollow which receives surface drainage. The effect of irrigation is to diminish the natural differences between soils. In the level country away from the hills the land over large areas is often of very equal quality and, even where this is not the case and distinctions are clearly discernible and are recognized by the people, one soil passes imperceptibly into another, and the question under which variety a particular field should be classed is often a fine one. Our surveying staff is only fitted to record obvious distinctions, and by setting it to decide disputable questions involving the amount of revenue which a petty landowner is to pay for the next twenty or thirty years we open a wide door to contention and corruption. The knowledge which a Settlement Officer acquires in his village inspections enables him to give due weight in actual assessment to variations in the value of the land in different estates. Moreover, it is the crops that we really assess, and we have now sufficient evidence in the crop returns to ensure that good and bad soils are not assessed at equal rates. A Settlement Officer who makes a proper use of these instruments is in no danger of pitching the demand in a sandy village in which the autumn crops consist chiefly of *bajra* and *moth* as high as in an estate with a soil capable of producing maize. Even where differential soil rates have been framed it has often been found that the people disregarded them in distributing the revenue over holdings.

* Mr. Melvill retracted his opinion as to the uselessness of soil classification (see his Settlement Report of north Ambala, paragraph 27).

264. Arguments for recognition of soil distinctions.—These considerations are of weight, but it does not follow that the demarcation of soils is a useless refinement in all parts of the Punjab. It is not true as regards the submontane districts and large tracts in the centre and east of the province that water is everything and soil nothing. There are marked differences in the unirrigated soils, and the system of cultivation on the well lands near the village site is sometimes quite distinct from that followed on outlying wells. If in certain cases one soil passes into another by imperceptible gradations, in others the boundary between them is sharply defined. No one can fail to observe the line where ordinary loam ends and the low-lying stiff clay, sometimes known as *kalar dahr*, which yields precarious crops of coarse rice, begins, and the strength or weakness of an estate may be directly traceable to the preponderance of one or other of these soils. Though loam passes into sand by degrees, and level sandy land under certain conditions of rainfall and sub-soil yields excellent crops, the distinction between uneven wind-blown sand and the level land with which it is intermixed is clearly marked, and the difference in productiveness is very great. Even where the transition is gradual it will commonly be found that the soils lie in blocks and that the only dispute is where exactly the line of demarcation should be drawn. In the United Provinces the soils are usually recorded field by field at measurement, but it is the business of the Settlement Officer when he inspects an estate to determine the limits of each block of soil, after which the boundaries which he adopts are graphically shown on the map and no further dispute is possible. It is perfectly true that a Settlement Officer's local knowledge and careful study of the crop returns will probably save him in any case from making gross errors in the pitch of his assessment in different villages. But he has not only to satisfy his own mind, but to justify his action to the controlling authorities, and simplicity may be pushed so far as to make intelligent supervision difficult. A proper analysis of cash rents may be impossible without some soil demarcation. The fact that some of our early Settlement Officers worked without soil distinctions is not of much weight. Rent was then in a very undeveloped state, and they made that fact their apology for failure to frame differential soil rates. Moreover, assessment circles were then smaller and more homogeneous than they now are, and the estates in a single circle were often grouped in two or three classes for which separate rates were employed. Nor does the fact that in distributing the demand over holdings the people have often rejected soil distinctions count for much. They did so largely in early settlements from ignorance or inexperience, or because in the original allotment of the land between the different members of the brotherhood every proprietor had obtained a share of each sort of land in the village, or because ancestral or customary shares were still fully recognized. Where the more powerful coparceners had managed to possess themselves of an excessive share of the good land, it was to their interest to adopt an all-round rate (*sarsari parta*), and this mode of distribution saved subordinate settlement officials a great deal of trouble. The landowners of to-day are less inclined to such simple methods of distribution, and even where the allotment of the village lands as it existed at the first regular settlement was roughly equitable, the changes of half a century may have altered it profoundly. Land has passed from hand to hand, and the tendency may

often have been for new owners and mortgagees, especially when they belonged to the money-lending class, to acquire an undue proportion of the more valuable lands.

265. Classification should be simple.—No general rule can be laid down, for everything depends on local circumstances. All that can be said is that the classification should be as simple as possible, and be based on broad differences of a fairly permanent character which affect in a marked degree the economic rental of the land. The test to be applied to it is its sufficiency for practical purposes, for, as has been well remarked, a "Settlement Officer must remember that he is a land valuer, and not a mineralogist."* The use of such distinctions as *nai* and *dofasi* is dangerous, unless it is certain that the conditions these terms denote are permanent attributes of the land to which the terms are applied. In districts north of the Salt Range it is quite right to record separately the unirrigated manured land near houses (see paragraph 261), for the people themselves recognize that such lands are far more valuable than the rest of the unirrigated area. It is much more doubtful whether another distinction in vogue in these districts between embanked land or *las* and ordinary loam or *maira* is worth retaining in our records, for landowners often refuse to make any difference between them in distributing the revenue over holdings. Poor stony or very sandy land below the hills is known as *rakar* and very sloping land on hillsides as *kalsi*, and they ought to be so recorded, because the assessment rates applied to them must be far lower than those adopted for *maira*. A wide divergence between the cash rents usually paid on two classes of land is the best proof of the necessity of showing them separately in the record. This affords ample justification for recording sandy uneven land as *bhur* in some of the south-eastern districts. Where the produce is divided, both the share taken by the landlord and the crops grown must be considered. Any change in the classification hitherto followed in the annual returns, unless it be in the direction of greater simplicity, must embarrass a Settlement Officer in his use of the statistics which they contain, but this should not prevent the alteration at settlement of an existing classification which is clearly insufficient. The scheme adopted must be on the same lines throughout a district, but a division of land among different soils, which is found necessary in one circle, should not be carried on into another where it is not required. Every needless elaboration should be avoided; for example, it may be quite useless to record for irrigated lands the soil differences which are of practical importance in the case of unirrigated lands. But it is sometimes advisable to record the difference between lands irrigated by sweet and bitter wells.

266. Marking of soils on maps.—The plan followed in the United Provinces of colouring the boundaries of the different blocks of soil in the field map is a good one. A similar device is used in the Punjab for indicating the limits of the area attached to each well.†

*Vincent Smith's Settlement Officers' Manual for the North-Western Provinces, page 126.

†Where it has been found that the people have themselves divided the estate into blocks (known in Peshawar as *vands*) bearing distinctive names, the same plan has sometimes been adopted. It is useful if the division made depends on difference of soil.

267. Classification of uncultivated land.—So far we have been dealing only with cultivated land. For assessment purposes all land is regarded as cultivated which is under crop or fruit trees, or has been under crop or fruit trees in the three previous harvests.* Uncultivated land is classed as *banjar jadid*, *banjar kadim*, and *ghairmumkin*. If for four successive harvests land which once was cultivated has not been sown it is classed in the last of the series as *jadid* or new fallow. If it continues to be uncultivated this entry should be maintained for the next four harvests, after which the land will pass into the category of *kadim* or old fallow. But *kadim* also includes all culturable waste whether it has ever been under the plough or not, and it is proper to class all grazing land of fair quality as *kadim*, even though existing conditions of rainfall and sub-soil water level preclude its cultivation unless canal irrigation can be, and is, introduced. The term *ghairmumkin* is reserved for barren land. It is necessary to instruct *patwaris* carefully as to the distinction between *kadim* and *ghairmumkin*, otherwise they are apt to record land which is useless either for tillage or pasture as *kadim* because it yields for a brief period in the rains a scanty supply of poor grass. Lands under buildings, roads, streams, canals, tanks, etc., and barren sand (*ret*) or *kalar* should be entered as *ghairmumkin*, any further description which seems necessary being added, e.g., *ghairmumkin abadi*, *ghairmumkin sarak*, *ghairmumkin ret*. For the colours and signs used in field maps to distinguish the different kinds of uncultivated land the specimen map given in the *patwaris'* Manual of Land Measurement may be consulted. Copies of a sheet of conventional signs to be used in cadastral maps for depicting natural and artificial features, as approved by the Survey Department of India, are supplied to Settlement Officers.

*This is the general definition. But poor land is found under the hills and in the low hills which only yields a crop every third or fourth year and yet must be regarded as cultivated for assessment purposes.

CHAPTER XIV.—The Record of Rights.

268. Elaborate revisions of records of rights at settlement to be voided.—It was, as we have seen, the object of the framers of Act XVII of 1887 to avoid elaborate periodical revisions of village records of rights by the expensive agency of a settlement establishment. The complete records drawn up at regular and revised settlements before 1887 and the measures introduced by Colonel Wace for the improvement of the *patwari* and *kanungo* establishment made this important change in settlement procedure reasonable, though it has not been possible to go as far in the direction of making the action of the district record agency at settlement identical with its action at other times as Colonel Wace contemplated. Before dealing with the records framed under the provisions of the present Land Revenue Act, a brief description of the contents of the record of earlier settlements and of the principles on which they were prepared may be useful.

269. Mr. Thomason's remarks on records of rights.—Mr. Thomason's remarks on the duties of a Settlement Officer in connection with the framing of records of rights apply to a condition of things now past. But some of them are still worth quoting, not only because of their interest from an historical point of view, but also because the principles laid down are of permanent value. In the fifth chapter of the Directions for Settlement Officers he observed :—

“ The object of the investigation is not to create new rights, but to define those that exist. The full exercise of old acknowledged and still existing rights may have been partially in abeyance, and these it may be necessary more fully to develop, but, generally speaking, no change should be made in existing rights, or in the mode of their exercise, without the full concurrence of those whose interests may be thereby affected.

“ The process (of forming the record) is essentially judicial ;* it is judging between man and man ; but all authoritative decision should be avoided as much as possible. The great advantage of the procedure is that the Settlement Officer comes amongst the people as their friend and peacemaker rather than as their judge. * * * * * The task is a delicate one, and he must be very careful lest in the attempt to prevent disputes he excite them, and lest whilst endeavouring to allay animosities, he only inflame them.

“ The Settlement Officer will find his end best answered by doing everything as much as possible through the people and deciding nothing himself that he can avoid, and also by being most careful that every minute feature of a tenure and every possible bearing of a right is fully recorded. * * * * *

“ Completeness of record can only be ensured by great vigilance on his part. The villagers are themselves reluctant to lay open to public

*This of course applies especially to a first regular settlement.

scrutiny the internal economy of their village. They are distrustful and slow to appreciate the motives which lead to the enquiry. The strong, the crafty, and the dishonest wish to avoid a proceeding which will tie their hands and close every door against future encroachment and intrigue. Again, the process is a laborious one, which the persons employed in the formation of the record are apt to slur over. Each peculiarity of the tenure probably has to be elicited by repeated questions and the expressions to be very carefully adjusted, so as exactly to meet the case. The natives of this country not excepting those in official employ; as well as all persons who work for show and effect rather than from principle, are peculiarly prone to inaccuracy and slovenliness. Here then all depends upon the Settlement Officer. By well selecting his agents and thoroughly tutoring them, and by making gradations of scrutineers, he may lessen his work or increase its polish, but all must ultimately centre in himself. He must understand the subject himself thoroughly, he must accustom his mind to classify and methodize his work, he must learn to detect the weak or incomplete points of a statement, he must call into practice all these powers with unremitting watchfulness and diligence; above all, he must be actuated by a simple desire to promote the best interests of the people; and, by the uniform and conciliating exhibition of this feeling, he must win their confidence and attachment. In proportion as he possesses these qualifications, he will be entitled to the character of being a good Settlement Officer.”*

270. Records of rights in early Punjab settlements.—The contents of a record of rights according to Mr. Thomason’s Directions, which were followed with more or less exactness by our earliest Settlement Officers, were :—

- (1) *Naksha thakbast* or sketch map of the boundary with a record showing how each boundary was laid down.
- (2) *Shajra* or field map.
- (3) *Khasra* or register of fields.
- (4) *Khatauni* or *Muntakhīb Asamiwar*.—A statement of proprietors and tenants’ holdings with a detail of fields and a note of the rent paid by each tenant.
- (5) *Tahrīj Asamiwar*.—An abstract of the *khatauni* showing tenant’s holdings with their areas and rents but without any detail of fields.
- (6) *Darkhwast malguzari*, or engagement of landowners accepting the assessment.
- (7) *Khewat* showing the area and revenue of each proprietor’s holding. This was not a separate document, but formed part of the next paper No. (8).
- (8) *Ikrarnama* or *wajib-ul-arz*, i.e., the village administration paper, which Mr. Thomason regarded as “the most important of all the papers, for it is intended to show the whole of the constitution of the village.”†

*Directions for Settlement Officers, edition of 1850, paragraphs 76 and 146, 147 and 149.

†Directions for Settlement Officers, edition of 1850, paragraph 167.

- (9) The *jamabandi*.—A list of holdings cultivated by owners, occupant tenants, and tenants-at-will with the fields contained in each and the sums payable either as rent or revenue. It was based largely on the *khatauni*, but was prepared at the close of settlement, and was intended to be the first of the *patwari*'s annual *jamabandis*.
- (10) The *rubakar-i-akhir*, or brief abstract of the settlement proceedings.

The preparation of a *shajra-nasb* or genealogical tree of the proprietors was not as a rule considered necessary.*

271. Imperfections of early records of rights.—It was inevitable that these first records should be in many respects imperfect. Mr. Prinsep, whose zeal for reform made him a severe critic of the past, traced their deficiencies mainly to the prominence given in the Directions, framed originally for a province in which Settlement Officers had no judicial powers, to possession as their rule of decision, and to the tendency of our officers and their establishments to think that "possession meant actual cultivation of the land." He classified the principal errors to be found in them as consisting of—

- (1) failure to understand and correctly record village tenures, very many estates being described as *bhaiachara* where the members of the community were of one ancestral stock, the land divided in shares whether ancestral or customary, and the profit and loss regulated by such shares ;
- (2) mistakes as to separate holdings the most common being—
 - (a) the omission of names of coparceners, and of widows, minors and absentee owners, because they were not in actual cultivating possession ;
 - (b) the description of common holdings as separate and of divided interest as common ;
 - (c) the clubbing together of two holdings, occupied on different tenures, as one ;
- (8) the indiscriminate creation of occupancy tenant right.

272. Question whether records of rights could be corrected at a revised settlement.—He believed that at a revised settlement the record of a first regular settlement could be corrected by a simple order of the revenue officer, and that a judicial decision in a regular suit was not required, and in the settlements under his supervision he acted on this belief. This appears to have been also the view held in the North-Western Provinces when the 2nd edition of the Directions for Settlement Officers appeared in 1858† and Mr. Thomason devoted several paragraphs (245—252) of the Directions for Collectors to a description of the imperfections of the records of the first regular settlement and the duty of the Collectors to amend

*Directions for Settlement Officers, edition of 1850, paragraph 167.

†See the 6th paragraph of the circular of the Sadr Diwani Adalat quoted in Appendix XIX and compare the 24th and 26th of the Saharanpur Settlement, Instructions, printed as Appendix XX of that work. These two Appendices are referred to in Judicial Commissioner's No. 1479, dated 5th May 1865, as supporting Mr. Prinsep's view.

them.* Some of the best revenue officers of the day, however, held that errors in a record of rights could not be corrected at a subsequent settlement except by agreement or in consequence of a decree of a court, and their view was accepted as sound in policy and embodied in section 19 of Act XXXIII of 1871.

273. Measures taken to improve the record of rights.—Mr. Prinsep took great pains to remedy the defects indicated in paragraph 271, and essayed to close the door against future litigation by making his records exceedingly minute. To ensure a correct account of village tenures he made very elaborate genealogical trees of the proprietors, tracing the existing owners back where possible to the first founder or founders of the estate. Notes were added at the foot of the *shajra-nasb* showing the measure of right followed in each sub-division of the estate, and describing its early history and the circumstances out of which its existing tenures sprung.† To guard against the second class of errors, *parchas* showing the entries to be subsequently made in the *khewat khatauni* with reference to each owner's holding were compiled in duplicate from the *khasra* as measurements proceeded, and one copy was given to the proprietor concerned, so that he might have an opportunity of satisfying himself that his rights had been fully recorded. These *parchas* and the *khataunis* based upon them showed not only fields, but the number of trees, and the ground for dung-heaps, sugar mills, &c., in the separate possession of each shareholder.‡ The omission of these particulars in former records had in Mr. Prinsep's opinion been a fertile cause of litigation.§ Particular pains were also taken to make a complete record of rights of irrigation from wells and *chhambhs* (marshes).

274. Documents included in Mr. Prinsep's records of rights.—While he aimed at making his records minutely accurate he sought to reduce their bulk by getting rid of all superfluous papers. He dropped the *tahrij* which some of his predecessors had also discarded; and he combined the *khewat* and the *khatauni* into one form. While he made very full enquiries into village customs he got rid of the separate village administration papers (*wajib-ul-arz*) in which these had hitherto been recorded, substituting for them general records of customs drawn up for tribes or groups of villages (see paragraph 560). References to these codes and any special entries as to custom required by the circumstances of any particular village or holding were scattered through the other documents included in the record of rights. Thus customs relating to irrigation were noted on the well statement, and those concerning the rights of tenants in the *khewat khatauni*. Mr. Prinsep's settlement record consisted of (a) the general index, (b) *shajra kishwar*, (c) *khasra*, (d) *shajra nasb*, (e) *khewat khatauni*, (f) *naksha chahat*, (g) *darkhwast malguzari*, (h) *robakar-i-akhir*.

*They were invested with powers under section 20 of Regulation VII of 1822 for this purpose. For similar powers exercised by Deputy Commissioners in the Punjab see Financial Commissioner's Book Circular XLIII of 1858. They were much restricted by Book Circular XXXIII of 1860.

†See form given in Mr. Prinsep's Settlement Paper No. 11 and also his Settlement Paper No. 33, pages 3—6.

‡Settlement Paper No. 33, pages 15, 16 and 19.

§Settlement Commissioner's No. 170, dated 14th April 1864, to Financial Commissioner.

275. Records of rights under Act XXXIII of 1871.—The records of rights prescribed by the rules under section 15 of Act XXXIII of 1871 consisted of the same documents with the addition of a list of revenue assignees and their holdings (*naksha lakhiraj*), and of a *wajib-ul-arz*. Mr. Prinsep's plan of distributing among the other parts of the record of rights entries which had hitherto been grouped under appropriate heads in the *wajib-ul-arz* was considered inconvenient.

276. Records of rights under Act XVII of 1887.—It is provided in Act XVII of 1887 that there shall be a record of rights for each estate [section 33 (1)] or in exceptional cases for a group of neighbouring estates [section 47(1)]. Any records framed before the passing of the Act are, so far as may be, deemed to have been framed under the Act [section 2 (2)]. If the Local Government finds that there is no record-of-rights for an estate, or that an existing record requires special revision, it may by notification direct the making or special revision of such a record [section 32 (1)]. A notification of the sort may apply to all the estates in a district or other local area [section 32 (2)]. A specially revised record of rights supersedes the former record, but the entries in it do not affect any presumption in favour of Government which has already arisen from any previous record of rights [section 32 (3)]. A reference to paragraph 193 will show that this exception might possibly have important consequences.

277. Standing records and annual records.—A record framed at a settlement made before Act XVII of 1887 was passed, or in pursuance of a notification issued under section 32 of the Act, is known as a "standing record" as a convenient way of distinguishing it from the "annual record," an amended edition of the record of rights prepared for each estate yearly or at such intervals as the Financial Commissioner may prescribe, in which all changes which have occurred since the standing record was framed are, or should be, incorporated (section 33).

278. Presumption of truth attaching to entries in a record of rights.—Under the present Land Revenue Act entries in a standing record and in an annual record have an equal presumption of truth attached to them. An entry in either is "presumed to be true until the contrary is proved, or a new entry is lawfully substituted therefor" (section 44).

279. Alteration of entries in records of rights.—Existing entries in standing and annual records, except entries relating to change of yearly tenants, can only be varied in subsequent records by —

- (a) making entries in accordance with facts proved or admitted to have occurred,
- (b) making such entries as are agreed to by all the parties therein, or are supported by a decree or order binding on those parties,
- (c) making new maps where necessary (section 37).

Section 37 of the present Act differs from section 19 of Act XXXIII of 1871 in fixing no limit of time within which the facts justifying the alteration of an entry must have occurred. Perhaps the change was accidental; at any

rate its effect was not perceived by the chief author of the Act, Colonel Wace, who wrote in 1888 :—

“This section repeats the law on the subject, which was first enacted in section 19 of the Act of 1871. The main provision of both these sections is that the alterations made must be based on changes which have occurred since the settlement record was drawn up.”* In Revenue Judgment No. 4 of 1888 he held that “the law does not give the revenue officer authority to make an alteration of this kind except with the consent of the parties, or pursuant to a decree, or in order to make the record agree with facts which have occurred since it was made.”

This is the reasonable construction to put on section 37(a). It follows that an entry which was incorrect when it was made cannot be altered except by consent or in consequence of a decree or order binding on the parties. It is of course open to a revenue officer to apply under section 15 of the Act, for sanction to review an order by one of his predecessors directing the erroneous entry to be made.

281. Question of exclusion of names of absentees.—The provisions of section 19 certainly caused some embarrassment in dealing with questions of the entry of the names of co-sharers who were in possession of their shares, but whose names did not appear in the record, and of the striking out of the names of absentees. Cases of the former class could, as a rule, be amicably settled, but where the law was strictly carried out in the case of absentees, the result was the maintenance of a considerable number of obsolete entries. The question was raised after the passing of Act XVII of 1887 in connection with the re-settlement of Gujranwala, where the records were found to be burdened with the names of a good many persons who had been absent even at the first regular settlement in 1856. The Financial Commissioner ruled that—

“All questions regarding the exclusion of the names of absent right-holders, who have long been out of possession, from the record of rights, must be dealt with strictly in accordance with the provisions of section 37, Act XVII of 1887. These provisions are not in any way affected or relaxed by the provisions of sections 107, 108 of the Evidence Act (I of 1872) or by those of the Law of Limitation (Act XV of 1877). Thus no lapse of time, however long, will of itself justify the removal of the name of an absentee from the record.”

The question was afterwards reconsidered in 1896, and the Government Advocate gave an opinion, the most material parts of which are quoted below† :—

“Death and intentional abandonment are both ‘facts’.....As regards the fact of death, as soon as a person proves to the satisfaction of the Court that another person has not been heard of for seven years by certain individuals described in section 108 (of the Evidence Act), the burden of proof is placed by the law on those who assert that the absentee is still alive, and the Court is entitled to say to them : ‘well

*Financial Commissioner's Circular Memo. No. 52, dated 23rd November 1888.

†The full text of the opinion will be found in Financial Commissioner's Circular No. 1, dated 13th March 1896, which has been superseded by Circular No. 2, dated 3rd June 1903.

you must prove the fact ; if you fail to do so, I shall find the fact against you, and decide that he is dead." As regards intentional abandonment the proof of this would scarcely ever be direct proof of a specific declaration to this effect. It would almost invariably be a fact to be gathered, inferred from conduct ; and I have no hesitation in thinking that actual abandonment, if sufficiently prolonged and continuous, does, under the general power given by section 114, justify the Court in presuming, *i.e.*, regarding as 'proved' the element of *intention*, in the absence of explanation warranting a contrary inference.

"It seems to me perfectly clear that if the fact of death or the fact of intentional abandonment be thus legally held as 'proved' to have occurred, this does, under section 37 (a) of the Land Revenue Act, justify the making of an entry in accordance with that fact.

"The record is prepared in accordance with facts believed at that moment to be true. If at any later date it be proved that this belief was erroneous,—*e.g.*, that a person entered as merely absent had as a fact died at an earlier date, although his death was not known or suspected when the entry was being written,—this in my opinion is undoubtedly a fact, proof of which would warrant an alteration of the entry."

281. Existing rules on the subject.—The existing rules on the subject are as follows :—

"(1) When a right-holder entered in the record of rights or annual record whether he is or is not described therein as an absentee(*ghair hazir*) or as out of possession (*ghair kabiz*), has not been heard of for seven years by those who would naturally have heard of him if he had been alive, the officer attesting a mutation may (unless he sees reason to the contrary) presume that he is dead and pass orders on the case accordingly ; but before ordering the omission of his name from the record of rights or annual record such officer should satisfy himself that all reasonable endeavour has been made to ascertain whether the absentee is alive and to give him an opportunity of appearing."

"(2) When a right-holder entered in the record of rights or annual record as *ghair hazir* or *ghair kabiz* has been heard of within seven years, but has been so entered for more than twelve years, the *patwari* shall enter the case in his register of mutations and shall report it to a Revenue Officer. The Revenue Officer to whom the case is reported shall enquire into the question whether the right-holder has abandoned the land or his interest therein. All reasonable endeavour shall be made to give the right-holder an opportunity of appearing and stating his claim. Direct evidence of an intention of abandonment will rarely be forthcoming ; but the intention of the right-holder may be inferred from what can be ascertained in regard to his conduct. Long absence coupled with entire severance from all concern with the land or interest is a strong circumstance to be taken into consideration in determining whether there has been abandonment or not. If the Revenue Officer finds that the right-holder has abandoned the land he shall pass an order accordingly.

“ Provided that, if the right-holder was a minor when first recorded as *ghair hazir* or *ghair kabiz*, no such order shall be passed until it appears that he is, or if still living would be, thirty years of age.

“(8) No new entry of any one as *ghair hazir* should be made. A right-holder should not be entered as *ghair kabiz* if he is himself in legal or constructive possession, as when he has put some one else in possession on his behalf, or the land is lying waste, or he is by reason of poverty unable to cultivate it. A familiar instance would be where a sepoy has left his land in his brother's possession while he is with his regiment. In such a case the sepoy should be entered as in possession of the land through his brother. An entry of *ghair kabiz* should not be made unless some other person than the right-holder is in adverse possession.

“(4) No effect shall be given to any order (1) directing the omission from the record of the name of a right-holder who has been entered as *ghair hazir* or *ghair kabiz* or (2) directing the entry of a right-holder as *ghair kabiz*, until such order has been confirmed by the Collector or Revenue Extra Assistant Commissioner.

“(5) All such orders shall be preserved as orders sanctioning mutations in the records.”

282. Record of mutations.—As the rules which regulate the incorporation of mutations in records of rights are exactly the same, whether the record is a standing one framed under the supervision of a Settlement Officer, or an annual one prepared in the course of the ordinary routine of district work, they will be found in the Land Administration Manual. The procedure connected with the framing of the record of rights where the complete re-measurement of an estate is ordered has been noticed in Chapter XII.

283. Documents included in standing records and annual records.—A standing record and an annual record must include—

(1) Statement showing—

- (a) the persons who are landowners, tenants, or assignees of land-revenue in the estate, or who are entitled to receive any of the rents, profits, or produce of the estate, or to occupy land therein ;
 - (b) the nature and extent of the interest of those persons, and the conditions and liabilities attaching thereto ; and
 - (c) the rent, land-revenue, rates, cesses, or other payments due from and to each of those persons and to the Government ;
- (2) such other documents as the Financial Commissioner may, with the previous sanction of the local Government, prescribe.

A standing record must also comprise—

- (3) A statement of customs respecting rights and liabilities in the estate ;
- (4) a map of the estate.*

284. Contents of the annual records.—The annual record should consist usually of (a) the *jamabandi*, (b) a list of revenue assignments and pensions and (c) such maps as are required to show the changes in the map of the estate that have occurred since the previous record was prepared. Under existing orders a fresh *jamabandi* of each estate is only prepared once in four years, so that the legal description of the record as the “annual record” has become a misnomer. Attached to the *jamabandi* is a copy of all entries in the register of mutations attested by a revenue officer since the last *jamabandi* was filed. The annual record must also include an amended copy of the genealogical tree.* Certain statistical returns are filed with the *jamabandi*, but they form no part of the annual record.

285. Contents of the standing records.—A standing record should contain the following documents :—

- (1) A preliminary proceeding.
- (2) A *shajra kishtwar* or field map.
- (3) A *shajra nasb* or genealogical tree.
- (4) A *jamabandi* or register of the holdings of owners and tenants showing the fields comprised in each, the revenue for which each owner is responsible, and the rent payable by each tenant.
- (5) A list of revenue assignments and pensions.
- (6) A statement of rights in wells.
- (7) A statement of rights in irrigation, if any, from other sources.
- (8) A *wajib-ul-arz* or statement of customs respecting rights or liabilities in the estate.
- (9) The order of the Settlement Officer determining the assessment.
- (10) The order of the Settlement Officer distributing the assessment over holdings.

286. Advantage of issuing a notification under section 32 (1).—The chief difference between an annual record made after complete re-measurement and a standing record is that the former does not include the *wajib-ul-arz*. If no *wajib-ul-arz* exists, or if it is considered desirable to revise the entries in an existing *wajib-ul-arz*, a notification under section 32 (1) directing a special revision of the record of rights must be issued. It has become the rule to issue such a notification whenever a general reassessment of a district is ordered. By doing so certain technical difficulties are got rid of, and the principle of assimilating settlement and ordinary district procedure in the matter of framing records is not infringed to any extent worth mentioning.

287. Language, &c., of records of rights.—Records of rights are written in the Urdu language. The sheets of which the field map consists are most conveniently kept in steel cases with shelves on which they can be laid flat.† The other documents should be bound in one or more volumes. If the genealogical tree is prepared on a continuous sheet, it may be placed

*Financial Commissioner's Standing Order No. 23, paragraph 43.

†See Appendix VII, paragraph 19.

in a pocket in one of the volumes. If it is desired to alter the authorized forms of any of these documents to suit local conditions or requirements, the sanction of the Financial Commissioner should be obtained.

288. Preliminary proceeding.—The preliminary proceeding should state—

- (a) the authority under which, and the Collector by whom, it has been prepared ;
- (b) the documents comprised in the record* ;
- (c) the date of the beginning and completion of the record.

289. Shajra kishtwar.—The *shajra kishtwar* will be an entirely new field map or an amended copy of the old map according as complete re-measurement has, or has not, been ordered (see Chapter XII).

290. Shajra nasb jamabandi, list of revenue assignments and statements of rights in wells.—The form of the *shajra nasb* with instructions for its preparation are given in Appendix VIII. If an older and more complete *shajra nasb* already exists and a new one is drawn up in less detail a note should appear on the latter showing where the former document will be found.

The *jamabandi* and the list of revenue assignments and pensions should be in the same forms as the similar documents included in the annual record with the addition in the *jamabandi* of a column to show the former field number. The forms of these statements and instructions regarding their preparation will be found in Financial Commissioner's Standing Order No. 23. The *khataunis* prepared in accordance with the instructions in Appendix VII supply nearly all the material for the *jamabandi* which is to be included in the standing record-of-rights and that *jamabandi* is for the most part a transcript from the *khataunis*. The arrangement by which the *jamabandi* is only prepared for each estate once in four years cannot be carried out when a district is under settlement.

The form of the statement of rights in wells with instructions for filling it up will be found in Appendix VIII. It may be useful to add a column showing the area irrigated from the well in each harvest of the past four years in order to ascertain what is the average area actually watered. No special form has been laid down for the statement of rights in irrigation from other sources. Records showing the shares enjoyed by different estates and individual proprietors in the water of hill torrents and private canals, and the manner in which the water is distributed, are very valuable. It is usually convenient to prepare such records for groups of villages or for all the estates on a stream or a canal. A good account of irrigation statements of the kind referred to above will be found in Mr. Thorburn's Settlement Report of Bannu. When the Local Government has ordered the preparation of such records under sections 28 and 35 of the Punjab Minor Canals Act (No. III of 1905), the same presumption of truth attaches to entries made in them as belongs to entries in a record of rights made under the provisions of the Land Revenue Act. Section 28 (3) of the former Act gives similar authority to statements of the sort drawn up at past settlements.

*The pages in the record at which the various documents will be found should be shown. In this way the preliminary proceeding serves as an index.

The statements of rents, sales and mortgages, forms of which are given in Appendix IX, are also prepared when an estate is re-measured or its map revised at settlement.

291. Survey and record work to be carried out simultaneously.—Settlement Officers should bear in mind that their record work is of even more importance to the welfare of the people than the assessment, and should not sacrifice the accuracy of the record merely to the convenience of their assessment work. It is of course much more satisfactory to a Settlement Officer to have the figures of the new measurements before framing his assessment proposals, more especially in tracts where cash rents are common. But where the previous record-of-rights and the past crop-returns are fairly accurate he need not wait till the survey of a tract is finished before writing its assessment report. When a sufficient number of villages have been remeasured to enable him to judge of the trustworthiness of the statistics for each assessment circle, as a whole, he will ordinarily be in a position to submit a report proposing revenue rates and the total assessment to be imposed. The new *khataunis* of all estates should be complete before the assessment is announced and distributed over holdings, and the Settlement Officer must make his arrangements in connection with survey and record work to secure this end. But a considerable time usually elapses between the writing of the report and the receipt of orders.

It is sometimes necessary (as, for instance, in a tract where it is difficult to get water in the dry season, or where the floods make it impossible to carry on measurements in the summer or the rains, or where the ground is covered by snow in winter) to push on measurement work as fast as possible, leaving some part of the record work to be completed later on, but this should be allowed only by the express permission of the Settlement Officer. It is only in such circumstances that permission should ever be given to collect the establishment, or any part of it in one place; even if the Settlement Officer finds it necessary to allow time for a re-examination of finished work in the circumstances to which reference is made in paragraph 291-A., there is no need to collect the establishment in one place for that purpose. There is no objection, however, to their being collected for the preparation of the statements required for the assessment report. The Settlement Officer is required to report his action for the information of the Commissioner and Financial Commissioner if he decides to collect establishment at one place.

In all ordinary measurement work he should insist that the record be made in all respects complete from day to day along with the map.* Field measurements should not be begun in any village until all the squares or triangles have been laid, marked and checked, or where the area of the village is very large, a sufficient number for the working of one field season, and until the pedigree-table has been corrected and *khataunis* up to date written out by the *kanungo*. The *patwari* should not be allowed to map a new field until he has calculated the area of the last, and entered it up in the field book, the *khatauni*, the landowner's *parcha* and all lists in which

*See Appendix VII, paragraphs 6, 8 and 14.

it is ultimately to appear. He should total up each page in his field book as soon as it is completed and should enter up at once in the mutation register any mutation that comes to his notice. No *patwari* should be allowed to begin measurement work in a new village until the records connected with the village he has finished are in every respect complete, so far as he can make them so. Nor should any village be entered in the quarterly business statement as having its measurements finished until all the connected papers have been completed also. Each inspecting officer should devote his attention to securing that the record work is kept up to date with the mapping. He should himself correct as many as possible of the mistakes and omissions he may discover, and he should see that any others he points out are corrected without delay. Whenever a naib-tahsildar or tahsildar visits the village, he should attest as many as possible of the pending mutations, and when in the course of his check or attestation of the record, he finds that a mutation has taken place and has the parties before him, he should have it entered up and attest it at once, instead of leaving it to be entered up after he has gone and attesting it at his next visit, after the parties have been summoned before him again. As far as possible each survey party should be inspected by the *kanungo* weekly, by the naib-tahsildar once in each month, and by the tahsildar once in each quarter.

291-A. Attestation to be done promptly.—The chief guarantee of the correctness of the record-of-rights consists in a careful and regular examination of the *patwari*'s work, while it is proceeding, by the tahsildar and their subordinates. There is a strong tendency to hurry through the mere mapping and measurement work leaving the attestation of the record-of-rights to be completed at a later date. This leads to hasty and inaccurate work and to the introduction of many mistakes which take much longer to correct in the end than if they had been avoided from the first by careful attention of the record work. The tendency is due chiefly to two causes; first, the desire of the Settlement Officer to obtain as accurate statistics as possible for his assessment report; and second, the desire of the subordinate staff to show a large outturn of work in their business statements and to get through as quickly as possible the irksome work done in the field leaving the record work to be completed in the office. The risk of a final attestation lagging far behind survey is greatly increased when many extra *patwaris* or *amins* are employed. It should be one of the chief aims of the Settlement Officer in organising the work of his staff to have the attestation done as soon as possible after measurements are completed while the facts are still fresh in the minds of all concerned and before there has been time for many changes to take place. Time should not be wasted on minute investigation in the interval between the completion of field work and the naib-tahsildar attestation of the work already finished which if the instructions in paragraph 291 have been complied with should require no further checking at this stage. If as a result of lax supervision by *kanungos* or naib-tahsildar the Settlement Officer is compelled to allow it, it should not, unless the supervision has been grossly inefficient, materially add to the time allowed to the *patwari* to complete the totalling of his field book and *khataunis* and the preparation of the list of rents, sales or mortgages which is ordinarily calculated at one day for every hundred *khassra* numbers.

292. Order in which work should be done.—When the *shajra-nasb*, the *khataunis*, the *jamabandi*, the list of revenue assignments, the statement of rights in wells and any other statement regarding irrigation rights and the village lists of rents, mortgages and sales (Appendices VII, VIII, and IX) are ready, they must be finally approved after attestation by the Settlement Officer himself or one of his subordinates with the powers of an Assistant Collector. In the ordinary course, however, all these statements are finally attested first by the *kanungo*, then by the *naib-tahsildar* and lastly by the *tahsildar*. Final attestation should take place in the village concerned or at a place in its immediate vicinity and all interested persons should be summoned to attend.

When measurements are finished the *patwari* should inform the *girdawar* that he is ready for final attestation. After the *girdawar's* final attestation the *patwari* should begin the preparation of the copies of the field map (*part tahsil* and *latha girdawari*). This will keep him employed till the *naib-tahsildar* can come round for final attestation. At the *naib-tahsildar's* final attestation he should prepare the *wajib-ul-arz* for the Extra Assistant Settlement Officer's attestation, take up and report on all cases of exemption certificates for wells, prepare *mafi* files for the *tahsildar's* attestation and get ready the *bachh* file. After the *naib-tahsildar's* attestation the *patwari* should write up both copies of the *jamabandi* (with statements), colour the maps and prepare the *khasra girdawari*. He should then and not till then go on to another village. The only subsequent formal visits paid by the Settlement staff to the village will be—

- (a) the *tahsildar's* visit for final attestation and report on *mafi*.
- (b) the Extra Assistant Settlement Officer's visit to attest the *wajib-ul-arz* ;
- (c) the Settlement Officer's visit to announce and distribute the new demand.

293. Naib-Tahsildar's attestation.—The *naib-tahsildar* should read out and explain to the persons interested all the entries in the *khataunis* paying special attention to those regarding ownership and occupancy rights. He should at the same time pass orders on all outstanding mutations and incorporate them in the *khataunis*. In short he should see that the *khataunis* represent accurately the state of affairs at the time of his attestation as regards soils, rights of owners and tenants, rents, etc., and should file with them a certificate to the effect that he has done so and is satisfied that the *khataunis* are fit to be accepted as correct material for the standing record of rights. The *khataunis* will ordinarily be full of corrections and possibly difficult to decipher and as soon as possible, after the *naib-tahsildar's* attestation the attested material contained in them should be transcribed into *jamabandi* form and the *naib-tahsildar* after satisfying himself that this *jamabandi* agrees in all respects with the *khataunis* attested by him should enter upon it a certificate that he is satisfied that it is fit to be accepted as the *jamabandi* of the standing record-of-rights. In the case of each of the other statements, mentioned in the preceding paragraph, the *naib-tahsildar* should ascertain by such enquiry as he deems sufficient that it has been duly and correctly prepared, and on being so satisfied, he should sign it adding at the foot an order of attestation declaring it to be correct in all respects.

In dealing with the well statement, the chief matters to be attested are the shares in the well and in the water, and any entries as to the areas of crops matured in the past years. Seeing that rents are the basis of the assessment it is obvious that the list of those actually paid should be attested very carefully. The standing record-of-rights is prepared in duplicate, the object being that each duplicate shall have the same degree of evidential value as the other. In the case of the documents to be included in it the naib-tahsildar should see that both copies are correct and enter his certificate on both in identical terms in the manner described above.

293-A. Tahsildar's attestation.—When the tahsildar checks the attestation of the *khataunis* or *jamabandi*, he should ordinarily re-attest at least 20 per cent. of the entries and should satisfy himself that they correctly represent the state of things at the time of the naib-tahsildar's attestation, leaving any changes that have taken place since to be incorporated in the next *jamabandi*. He should have any errors or omissions he may discover corrected at once and should then endorse the certificates entered by the naib-tahsildar on the *khatauni* and both duplicates of the *jamabandi*. He should also as far as possible satisfy himself of the correctness of the other statements mentioned in paragraph 292 and having done so endorse the naib-tahsildar's certificates on them. No village should be entered in the business statement as having been attested by an officer until he has certified that all mistakes have been corrected and that the papers are complete in every respect.

294. In what circumstances the measurement *jamabandi* should be accepted as the *jamabandi* of the standing record.—When the tahsildar's final attestation has been completed, the map, *khataunis*, *jamabandi* etc., should be filed in the *tahsil kanungo's* office and it will be for the Settlement Officer to decide whether he will accept this measurement *jamabandi*, that is to say, the *jamabandi* prepared from the attested material contained in the *khataunis*, as the *jamabandi* of the standing record-of-rights. It is not necessary that the standing records of different villages should be of the same date either throughout a district or throughout a tahsil. The accuracy of the record is the first consideration. As a rule, the measurement *jamabandi*, need not be brought up to date towards the end of settlement operations. For instance, the measurement *jamabandi* attested as above described may be accepted as the standing record when the Settlement Officer is satisfied that it correctly represents the state of things at the time of the settlement naib-tahsildar's attestation and that no important changes have taken place since. A new up-to-date *jamabandi* to form the *jamabandi* of the standing record must be prepared, if the Settlement Officer is not satisfied that the measurement *jamabandi* was correct and complete up to the time of the settlement naib-tahsildar's attestation. A new *jamabandi* for inclusion in the standing record should not be ordered merely because a number of changes have occurred since the naib-tahsildar's attestation, as these will be brought to record in the next quadrennial *jamabandi*.

When the Settlement Officer decides that the measurement *jamabandi* may be accepted for inclusion in the standing record either he or the Extra Assistant Settlement Officer should enter on both duplicates of it an order to that effect. When, however, he determines to have a fresh *jamabandi* prepared for the standing record, he should have a *girdawari* made and

checked with special care and all changes brought to light incorporated in the new *jamabandi*, special attention being paid to changes in ownership and occupancy right. Changes in field boundaries should not be shown on the original map but on supplementary sheets. Changes in cultivation and in the holdings of tenants-at-will should be given effect to in the new *jamabandi*. The *jamabandi* prepared in accordance with the results of this *girdawari* should be very carefully checked and all changes made in the entries relating to ownership or occupancy rights since the preparation of the measurement *jamabandi* should be attested by the *kanungo*, *naib-tahsildar* and *tahsildar*. When all errors and omissions brought to light have been rectified, the *naib-tahsildar* and *tahsildar* should record on both copies of the *jamabandi* a certificate to the effect that it has been attested and is fit to be considered as the *jamabandi* of the standing record-of-rights. The Settlement Officer or the Extra Assistant Settlement Officer, if they agree, should also record on both duplicates of it an order to that effect.

294-A. When should a new *jamabandi* be prepared to form the basis of distribution of assessment.—The list showing the distribution of the revenue over different holdings (*fard bachh khatewar*) will usually be compiled direct from the *jamabandi* which has been declared to be the *jamabandi* of the standing record, but where there has been any long interval between the completion of the standing record *jamabandi* and the distribution of the revenue, a quadrennial *jamabandi* should, when the new assessment is about to be announced, be drawn up after a specially careful *girdawari*. In this should be incorporated all mutations that have taken place since the date of the *naib-tahsildar*'s attestation. It should be attested only as a quadrennial *jamabandi* is attested and should rank only as such. From it should be prepared the *fard bachh khatewar* of the new revenue which should be included in the standing record of rights as a part thereof so that if at any subsequent time it should be necessary in any case of dispute to refer to the standing record, the authoritative paper will be for a question of rights the *jamabandi* which incorporates the entries contained in the carefully attested *khataunis*, and for a question of revenue, the original *fard bachh khatewar* itself. In this connection it should be remembered that changes in holdings of tenants-at-will are of much less importance than changes in ownership or occupancy right and that changes in cultivation are of little importance where the assessment fluctuates with the area cropped at each harvest or where the owners agree to distribute the new revenue on shares or on the soils as classed in the measurement *jamabandi*. Where, however, the owners wish a re-classification of soil as a basis for the distribution of revenue, it will ordinarily be necessary to prepare a new up-to-date *jamabandi*.

294-B. Standing record in *killabandi* measurements.—Where the boundaries of ownership have been altered by *killabandi* operations, the standing record should be a *jamabandi* specially drawn up and attested after careful inspection of the cropping (*girdawari*) for two harvests after *killabandi* in order to make sure that the villagers have understood and acted upon their new field boundaries.

295. *Wajib-ul-arz*.—The *wajib-ul-arz*, or village administration paper, should be a record of existing customs regarding rights and liabilities in the estate. It should not be used for the creation of new rights or

liabilities, or for what may be called village legislation. Entries have sometimes been made which do not profess to embody existing usage, but to declare a course of action which the landowners agree to follow for the future. An example of this is the insertion of a stipulation that a fixed amount of the common grazing land will always be excluded from partition. It is doubtful whether this is strictly legal with reference to the words used to describe the *wajib-ul-arz* in section 31 (2) (b) of the Land Revenue Act, and, even if it is, it is questionable whether it is a wise use to make of the village administration paper. There is always a danger that some stipulation may be inserted as an agreement of all the landowners on which all are not as a matter of fact of one mind, because adherence to it is likely to produce results which officials think would be beneficial to the people. But orders issued by Government in 1881 distinctly allowed entries to be made in the *wajib-ul-arz* to facilitate the setting apart of portions of the common village waste for the planting of trees if the landowners agreed.* With reference to the provisions of section 42 (2) of the Land Revenue Act it is a convenient, though somewhat anomalous, arrangement to record the rights of Government in quarries, *kankar*, etc., in the *wajib-ul-arz*, (see paragraph 194).

296. *Wajib-ul-arz* of early settlements.—The *wajib-ul-arz* in the first regular settlements was sometimes a formidable document, but its real value as an evidence of village custom was not always proportionate to its length. Some remarks by Mr. Arthur Brandreth as to the way in which it was often drawn up may be quoted :—

“ The paper declaring the customs and containing the Code of rules for the future management of the manor (called now the administration paper) is always considered a most important document. Indeed, if fairly, and properly drawn up it is all-important, but this can so seldom be done that its value has been much exaggerated, and I fear that many officers have been in the habit of too rigidly acting upon it. It has often been merely an elaborate Persian document in the best office language, drawn up by some learned Hindustani *Munshi*, and copied for every man or of the *pargana*. Some few points have been ascertained in each case, but in general the villagers did not know their customs very well, and when they put their seals to the paper, no doubt they thought it very grand, though they did not know what it was about, as they could little understand the language. The rules are of two sorts; one, the rules laid down by Government, or points on which the whole *pargana* have the same custom, and, secondly, the special customs of the particular manor; these together take up a great number of pages, and the villagers are confused by the long code of rules, and merely say ‘ yes, yes, ’ and put their seals to the paper, hoping it is nothing very dreadful.”†

The existing rules on the subject are reproduced in Appendix VIII-E.

296-A. Revision of *Wajib-ul-arz*.—When the tahsildar's final attestation has been finished the tahsildar or the Extra Assistant Settlement Officer should proceed to revise the *wajib-ul-arz* in accordance with the above rules; those rules are subject to section 37 of the Act, which says that entries in the record of right shall not be varied in subsequent records otherwise than by making the changes there detailed. The revising officer should not attempt to re-arrange the old *wajib-ul-arz* or put it in better form, but should merely copy it with such few changes as are authorised by section 37. It must be remembered that he is not drawing up a new *wajib-ul-arz*, but bringing an existing one up to date. In case of a dispute the object of the revising officer should be to ascertain what the actual existing custom is and how far it differs from that entered in the *wajib-ul-arz* under revision.

*Punjab Government No. 643, dated 14th June 1881.

†Mr. A. Brandreth's Settlement Report of Jhelum, paragraph 296. Mr. Brandreth was fond of describing villages as manors.

If he can arrive at no definite and satisfactory finding on this question of fact he should repeat the former entry and leave the parties to a suit in the courts. If on the other hand he is able to arrive at such a finding he should amend the existing record by entering the custom actually found to exist. Such a procedure is not contrary to section 36 (1) or 37 of the Land Revenue Act, while any entry so made would of course be subject to the operation of section 45 of that Act. ~~Tahsildars~~ Tahsildars are authorised finally to attest undisputed entries only in a *wajib-ul-arz*. All entries which at the time of their attestation they find to be disputed should be referred by them for decision to the Collector or to an Assistant Collector of the 1st grade. When the *wajib-ul-arz* has been faired it can be filed in the district record office as part of the standing record, any necessary addition being left to be made to it as a supplement after the new assessment has been announced, and the village can then be told that revision of its records is complete, and that its settlement is over except for the announcement and distribution of the new assessment.

297. Orders determining assessment and its distribution over holdings.—The orders of the Settlement Officer determining the assessment and its distribution over holdings are referred to in paragraphs 518 and 534.

BOOK III—The Assessment.

CHAPTER XV.—Preparation for Assessment.

298. Clear understanding of principles and methods necessary.—

A Settlement Officer should start with some general idea of assessment work. It is not enough that he has learnt to survey and prepare records and obtained some idea of the principles of land revenue assessment in the course of a short deputation for settlement training. He should, if he is to employ his time from the first to the best advantage, have a clear understanding not only of these principles but of the methods of enquiry which have in practice been found most fruitful. A warning of this sort may appear needless, but the daily work of a Settlement Officer is very absorbing, and there is real danger that he may become so occupied with its details as to forget to acquaint himself sufficiently with the literature of the subject. In that case he may sometimes fail to see the wood for the trees. He may be seduced into the use of methods which have already been found faulty, or may neglect lines of enquiry which experience has shown to be valuable. Or, again, having himself arrived at sound conclusions, he may fail to present them to the controlling authorities in the way most likely to carry conviction to their minds. Besides mastering some general treatise on settlement work, he will find it useful to study carefully one or more assessment reports of special merit, as, for example, Mr. Purser's reports for Jullundur, Mr. Kensington's for Ambala, or Mr. Wilson's for the Shahpur district, these being supplemented by reports of recognised excellence published within recent years. Some of the reviews which Colonel Wace wrote when Settlement Commissioner are worth perusal as examples of the way in which assessment statistics should be handled.

299. Study of agriculture of tract.—A competent knowledge of the agriculture of the tract under assessment is necessary for a Settlement Officer everywhere and under all circumstances, but is of very special importance in tracts where cash rents cannot be appealed to as a test of the values of different soils and classes of land. Such knowledge is only to be got by careful observation and enquiry in the field supplemented by an intelligent use of the crop statistics. If a Settlement Officer sets himself from the first to acquire it he will lay the best foundation for his work. To learn the husbandry of each class of land and soil in the different circles, the crops grown and their yield, the ordinary rotations, the extent to which the strength of the land is restored by fallows and manuring, the labour expended in preparing it and keeping it free from weeds, the amount of seed and number of waterings required, the kind of cattle used and the cost of procuring and feeding them, the expenditure by which artificial means of irrigation are supplied and maintained, is the first step towards a proper valuation of the land. Failing cash rents, the Settlement Officer's chief reliance in calculating the standard assessment at one-fourth net assets referred to in the next chapter must be

on the produce estimate, and his power to prepare a good produce estimate depends largely on his knowledge of the local agriculture. In practical assessment work a proper understanding of the processes and instruments of farming, of what they are, and what they cost, is the best corrective of any tendency to over-assess highly farmed land simply because the produce is valuable, or to under-assess soils of which the tillage is easy and cheap, because the crops grown are not of a high class.

CHAPTER XVI.—Assessment Circles and Circle Rates.

300. Wide diversities of agricultural conditions in most districts.—A Settlement Officer making a general survey of one of the submontane districts may find below the hills a rough country seamed with ravines. As he marches southward the uneven land may pass gradually into a wide plain of good easily worked loam to be succeeded in its turn perhaps by stretches of stiff clay. On one side the plain may drop abruptly or in a long slope of broken land into the valley of one of the great rivers, part of which may now be beyond the reach of ordinary floods, while the remainder is subject to all the vicissitudes of fortune which the vagaries of a Punjab river involve. The plain above the valley may be scored with the sandy beds of hill torrents, dry in the winter, but spilling over a wide area in the summer rains, dropping here sand, there rich loam, and finally, when all the good silt has been lost, making the flooded land stiff and untractable by deposits of fine mud. The river valley and the belts of land along the hill streams may present a great variety of soils, perplexing because of the abruptness with which one passes into another, and the doubt whether existing conditions may not undergo speedy improvement or deterioration. In most of the districts at a distance from the hills physical changes are less rapid, but the country can still be divided into a few tracts of widely different character. The Settlement Officer will not only find that the natural aspect of the country and the quality of the soil alter as he passes from point to point; he will also, as his enquiries proceed, notice equally striking changes in the rainfall and the depth of the subsoil water. He will soon realize that the soil and climate of the different tracts have deeply affected the health and energy of the people, and that the various tribes of landowners also possess a very unequal amount of farming skill as the results rather of their past history than of their present environment. All these things combined—soil, rainfall, depth of water, climate, and the character of the cultivators, to which may be added the action of Government as an excavator of canals—produce notable variations in the agriculture of the different tracts. The amount of irrigation, the high or low style of farming, the crops sown and the certainty of their yielding a harvest, nearly everything in fact on which the amount of revenue which land can pay depends, spring from these causes.

301. Necessity of assessment circles.—No set of rates could be devised which would be of any use in assessing all the villages of a district. This is one reason for making Settlement Officers draw up proposals for each ~~tahsil~~ separately, but there are few, if any, tahsils, which it is wise to treat as units for rating purposes. If after weighing the matters referred to above the Settlement Officer can break up the country with which he is dealing into more or less homogeneous blocks, the estates in each of which have, with many individual peculiarities, a strong general likeness as regards the chief factors affecting the value of land, his own task in devising a fair assessment will be much assisted, rates can be framed as general guides, and the scrutiny of the assessment proposals by controlling authorities will

be greatly simplified. Such blocks or groups of villages are known as assessment circles. As noticed in paragraph 227 the division of the tract under settlement into assessment circles is one of the matters on which the Settlement Officer must obtain the orders of the Financial Commissioner at an early stage of his proceedings. If further knowledge shows that the original proposals were faulty, he should not hesitate to suggest their amendment at any stage of the settlement. It is important that the next Settlement Officer should find the statistical information referred to in the next chapter tabulated according to circles which he himself can accept. It must also be remembered that assessment circles are not only useful to Settlement Officers, but ought to be so defined as to aid Deputy Commissioners in the ordinary revenue management of the district, and especially in the matter of land revenue collections.

302. Assessment circles and circle rates.—An assessment circle then is a group of estates sufficiently homogeneous to admit of a common set of rates being used as a general guide in calculating the demands which can fairly be imposed upon them. This does not imply that the revenue of each village shall be the exact product of the application to its lands of the sanctioned circle rates. The general similarity which will admit of a single set of rates as a guide is quite compatible with differences leading in individual cases to a greater or less divergence from them in actual assessment. But such a deviation must be justified by reasons to be recorded in the village notebook, and, if it amounts in any estate to as much as 20 per cent., the Settlement Officer must give a special explanation of the divergence in the detailed village assessment statement submitted to the Financial Commissioner, (see paragraph 522). The rates should bring out the demand considered suitable for the whole circle within a margin of 3 per cent. either way of the demand approved of by Government.

303. Change of policy as regards the size of assessment circles.—As noticed in the last chapter it was usual in the earlier Punjab settlements to form a larger number of circles than is now deemed necessary, and inside these circles to group villages supposed to possess similar revenue-paying capacity in classes for each of which a separate set of rates was framed. In some settlements very big circles have been adopted in accordance with the view advocated by the late Colonel Wace as part of his general policy of simplifying in every possible way the work of the *patwari* and *kanungo* staff, both during and after settlement. It is to be feared that the reduction of the number of circles has in some instances been carried too far.

304. Objections to very small circles.—The plan of having very small circles is undoubtedly open to criticism. It increases the labour of reporting assessments for approval and of maintaining annual returns after settlement. It is liable to the more serious objection that it prevents a Settlement Officer from taking a wide enough view of his subject and encourages a mechanical application of rates without sufficient regard to the circumstances of individual estates. The conclusions to be drawn from statistics becomes more reliable when the area to which the figures relate is fairly large, for in that case accidental and temporary aberrations on this side or that to a great extent neutralize one another.

305. Very large circles, when inconvenient.—No fault can be found with very large circles if the natural features and the rainfall of the country produce a broad equality of condition over a wide area. But if estates which are in no sense homogeneous are grouped together, the simplicity which results is only another name for confusion. An examination of the different villages and a study of their statistics produce no distinct impression regarding the circle as a whole, the picture is blurred by a mass of inconsistent details, and the Settlement Officer's work is reduced to a village by village assessment, which may be excellent in itself, but which he cannot justify to himself or to others by any general arguments. The rates are in no true sense assessment guides; they are merely the averages deduced from the sum of the village assessments.

306. Proper policy.—A middle course is the best. In grouping estates into circles attention should be steadily directed to those matters which must have a marked effect on the pitch of the assessment or on revenue management by the Deputy Commissioner, and small points of difference should be neglected. Where the existing classification is too minute it will generally be possible to retain the old circles unbroken, merely clubbing them together in larger groups. It is not worth while to make small changes simply because a more symmetrical arrangement could be obtained by moving an estate here and there from one group to another. The Settlement Officer has power in his village assessments to make the existence of small inequalities harmless. If the old circles are broken up much trouble arises from the necessity of retabulating past statistics from the village note-books instead of taking the figures straight from the circle registers. But where great changes have been brought about by the action of rivers or torrents, or by the introduction of a new means of irrigation, it may be necessary to face the inconvenience involved in a radical construction of assessment circles.

CHAPTER XVII.—Assessment Statistics.

307. Village, assessment circle, and tahsil revenue registers.—

It was one of the chief objects of the reorganization of the land record agency effected in 1885 that Settlement Officers should have ready to hand in a convenient form a continuous record of statistics which could be utilized as assessment data, (see paragraph 82). A Settlement Officer of the present day finds most of the statistical information he requires in the village, assessment circle and tahsil revenue registers, and the time and labour are saved which were formerly spent in compiling elaborate special assessment returns.* A description of the contents of these registers will be found in the Land Administration Manual, Chapter XI. The abstract village note-books will be found useful. Each Settlement Officer should report before he finishes his work whether the form in use is suited to the district. It ought to present in a striking way the data which will help the Deputy Commissioner to decide whether a suspension of revenue is needed in any particular harvest, or whether on the contrary arrears can be collected. The statement most important for assessment purposes which the revenue registers contain are the crop returns. Settlement Officers have now in many cases a fairly accurate record of the harvests of past years in each estate, which no amount of diligence could obtain for them under the old system. Men will certainly wonder in future that village assessments were made with any measure of success, when no trustworthy information regarding so vital a matter existed. It is necessary when a tract is being reassessed to supplement the information respecting rents and land transfers to be found in the registers by drawing up village lists of rents, mortgages and sales in the forms given in Appendix IX.

*Where new abstract village note-books are prepared at settlement the first entries should generally show the average figures for the years on which the assessment calculations were based.

CHAPTER XVIII.—The Standard of Assessment, Net Assets and Rents.

308. The standard for assessment of a proportion of the net assets.—The preamble to the first Punjab Land Revenue Act, XXXIII of 1871, declares that “the Government of India is by law entitled to a proportion of the produce of land of the Punjab to be from time to time fixed by itself.”* The English Government inherited his claim, which is really founded on immemorial custom, from the native rulers whom it replaced. The principle being admitted, the question at once arises how this proportion is to be fixed. Obviously it would be unfair to take in all cases the same fraction of the gross produce. Two plots of land of equal size may yield exactly the same amount of wheat, but in one case the crop, favoured by a fertile soil and an abundant rainfall, may be raised at the cost of little labour and money, while in the other it may be the result of laborious tillage and the expenditure of capital on deep wells and the costly cattle required to work them. Native rulers met the difficulty in a rough and ready fashion by varying the share of the produce demanded according to the character of the soil and rainfall, and sometimes by allowing special exemptions in the case of wells. The same result is reached by making the standard of assessment a fixed proportion, not of the gross produce or gross assets, but of the “net produce” or “net assets.” The last phrase is defined in the settlement instructions (see rule 6 of the Instructions of 1893, revised in 1914, in Appendix I) as follows :—“The net assets of an estate mean the average surplus which the estate may yield after deduction of the expenses of cultivation. A full fair rent paid by a tenant-at-will, though sometimes falling short of the net assets, may, generally, in practice and for purposes of assessment, be taken as a sufficiently near approximation to them on the land for which it is paid.” The definition adopted in the amending Act and now incorporated in the Land Revenue Act as clause 18 of section 3 is identical. The net assets also include any income which the proprietors derive from the spontaneous products of their waste and cultivated lands, and, strictly speaking, any dues of whatever sort which they get in their capacity of landowners.

309. Assessment must not exceed one-fourth net assets.—The successive steps by which the Government share of the net assets has been reduced from five-sixths to one-fourth have been shown in Chapters III and VI.† A Settlement Officer should enquire what the “full fair rent” of an assessment circle would be if it were all cultivated by tenants-at-will not holding

*Compare the 4th of the Assessment Instructions of 1893, revised 1914, in Appendix I, and the opening words of Regulation XIX of 1793, by which the premanent settlement was created in Lower Bengal.

†It is noted in the Government of India Resolution No. 1, dated 16th January, 1902, on the Land Revenue Policy of the Indian Government that “Regulation II of 1793 pointed out that the Government share of the produce was fixed by estimating the rents paid by the tenants, deducting therefrom the cost of collection, allowing the landlords one-eleventh of the remainder as their share, and appropriating the balance of ten-elevenths as the share of the State.”

the land on specially favourable terms. If he can determine what is a "full fair rent" rate for each class of land in an assessment circle in the case of fields held by ordinary tenants-at-will, he can, for the purpose of calculating the assessment, assume a rental for the whole assessment circle by applying the rates not only to the area in the possession of the tenants-at-will, but also to the areas cultivated by the owners themselves or by privileged tenants, and 25 per cent. of this rental and of the net income from miscellaneous sources will be the highest revenue which he can impose. In future "rental of an estate" and "net assets of an estate" will be used as synonymous terms.

310. The net assets estimate must be honestly framed.—It is admitted in the instructions (see rule 6, appendix I (D)) that the process of determining the net assets of an estate is in the Punjab generally very difficult, and that in cases in which the bulk of the land is cultivated by the petty proprietors themselves "the calculation. . . . becomes not only difficult but hypothetical, and the results of greater uncertainty and less value." Could we, moreover, calculate with perfect accuracy the standard assessment, many circumstances might convince us of the prudence of foregoing a part of it when fixing the revenue demand. This is implied in the fourth of the rules of 1893 revised in 1914 (appendix I (D)), which, after asserting the claim of Government to a share of the produce of the land to be fixed by itself, adds—"The exact share to be taken is a question to be settled separately for each tract and estate under assessment according to the circumstances of the case," and also in rule 7—"The assessment of an estate will be fixed according to circumstances, but must not exceed one half the value of the net assets." This limit of assessment for particular estates has now been modified and the standard of assessment for assessment circles reduced. But the main principles determining the pitch of assessment in relation to the net assets still apply. Neither the admitted difficulty of determining the true rental nor the fact that the circumstances of the tract under settlement seem to him to make it expedient to deviate pretty widely from the theoretical standard in actual assessment absolves a Settlement Officer from the duty of framing the most careful estimate possible of the net assets. It is dishonest to manipulate the estimate in any way with a view to diminish the divergence between it and the proposed demand. If the reasons for deviating from the standard are really strong the Settlement Officer should be able to convince his superiors of their validity.

311. The net assets estimate founded on an analysis of rents.—The net assets estimate must be founded on a careful analysis of existing rents with a view to discover what is the normal rental of each class of land for which it is proposed to frame a separate revenue rate. All rents which are obviously of a favourable character, such as those paid by occupancy tenants, or rents whose very form suggests that they are purely customary, as when a tenant-at-will pays the land revenue with the addition of a small proprietary fee, must be excluded from the calculation. The extent to which other abnormal rents can be eliminated will be considered later on. For further remarks on the nature and purpose of the net assets estimate reference should be made to paragraphs 2 and 8 of Appendix XX and to rules 1—12 of the rules framed under section 60 of the Land Revenue Act.

312. Classification of rents.—The kinds of rent which are commonly met with are—

- (a) a definite share of the crop (*batai* rents) ;
- (b) cash rents for particular crops which cannot conveniently be divided, at fixed rates per *kanal* or *bigha* (*sabti* rents).
- (c) cash rents paid on land irrespective of the crop grown upon it (*nakdi* rents) ;
- (d) lump grain rents or rents consisting of a fixed amount of grain in the spring, and a fixed amount of money in the autumn harvest (*chakota** rents).

The crops for which money rates are usually taken are sugarcane, cotton, opium, tobacco, vegetables and *chari*.

313. Cultivating occupancy of land in the Punjab.—The Punjab is in the main a country of peasant owners tilling their own fields. The return of cultivating occupancy for the quinquennial period ending June 15th, 1927, shows 44½ per cent. of the cultivated area of the province as tilled by the proprietors themselves and 8½ per cent. as in the possession of occupancy tenants.† In six districts the proportion cultivated by owners is between 60 and 70 per cent., while in three others in the south-west of the Punjab it falls below 30 per cent.‡ The remaining 47 per cent. was in the hands of tenants-at-will, and as regards rent may be classified as follows :—

	<i>Per cent.</i>
(a) Paying in kind with or without an addition of cash	38
(b) Paying the land revenue with or without a proprietary fee (<i>malikana</i>)	4
(c) Paying other cash rents ..	9
(d) Free of rent or at a nominal rent	1

More than a third of the area under "other cash rents" is in three districts in the south-east of the province.

314. Rent data available to be clearly stated.—The extent of the data on which a Settlement Officer can rely in estimating the assumed rental or net assets of the tract under assessment is a matter of such importance that it is always well to give in an assessment report a table showing for each circle the percentages of the cultivated area tilled by—

- ✓ (1) owners ;
- ✓ (2) tenants with rights of occupancy ;

*The term is also used to denote a lump cash rent paid on a holding.

†See statement II appended to the Land Revenue Administration Report for the year ending 30th September 1927. The figures for owners include tenants holding direct from Government, and a small area held by tenants free of rent.

‡Rohtak 62, Karnal 64, Simla 84, Ludhiana 63, Rawalpindi 62, Kangra 64, Multan 22, Jhang 29 and Montgomery 20 per cent.

(§) tenants-at-will—

- (a) free of rent or paying rents consisting of the revenue alone or the revenue plus a *malikana* ;
- (b) paying other cash rents ;
- (c) paying *batai* or *zabli* rents ;
- (d) paying *chakota* rents.

Under the head 3 (a) will come all rents paid by tenants-at-will which can be rejected without further discussion as useless in estimating the net assets. Further examination may show that some of the rents under the next three heads must also be excluded, but *prima facie* they furnish material for calculating the real renting value of the tract. Separate estimates should be deduced from the rents grouped under each of these three heads, unless the area under any one of them is so small that conclusions drawn from it as to the renting value of the rest of the land would be worthless. Where part of a circle is to be put under fixed and part under fluctuating assessment, it is a good plan, if possible, to frame separate net assets estimates for each of these parts.

CHAPTER XIX.—The Net Assets Estimate.

Based on batai and zabti rents.

315. Produce estimates.—The estimate based on *batai* and *zabti* rents is sometimes called the produce estimate, as the framing of it involves an attempt to determine the money value of the whole yearly produce of the tract under assessment. Strictly speaking, the estimate of the value of the gross produce and that of the share thereof due to the State should be distinguished. The latter is properly called the one-fourth net assets estimate. Both are best combined in a single statement, a suitable form for which is given in Appendix XII. A separate estimate is framed for each assessment circle. It is a good plan to prepare one also for each estate as a guide to the distribution of the revenue fixed for a whole circle over the villages contained in it.

316. Factors contained in produce estimate.—The evolution of a correct net assets estimate based on *batai* and *zabti* rents depends on our knowledge of four things, namely :—

- (a) the average acreage of each crop on each class of land for which it is proposed to frame separate rates ;
- (b) the average yield per acre of each crop so grown for which rent is taken by division of produce ;
- (c) the average price obtainable by agriculturists for each of the crops referred to under (b) ; and
- (d) the actual share of the gross produce received by land-owners in the case of crops which are divided, and the rent rates in the case of *zabti* crops.

In the actual condition of agriculture in the Punjab it would be absurd to estimate a fixed money assessment to be paid for the next twenty or thirty years on the results of any single year. Acreage, outturn and prices all vary within wider or narrower limits, and the fluctuations of the past will tend to repeat themselves in the future.

317. Deduction of rental and standard assessment.—The process of deducing the rental of any class of land from the above four factors is simple. In the case of crops which are divided the acreage multiplied by the yield gives the gross produce, and the last divided by the price gives the money value. The portion of the crop taken by the landlord being known, the rental can at once be deduced from the value of the whole produce. In the case of *zabti* crops no estimate of yield or price is necessary. The acreage multiplied by the rent rate gives the rental. One-fourth of the rental is the full theoretical assessment. To deduce theoretical revenue rates the assessment may be divided by the area to which the assessment or revenue rates will be applied. This will usually be the cultivated area of some particular year as shown in the area statement or *milan rakba*, or, where the estates have been remeasured, the cultivated area of each

when it came under survey. It has been more usual in recent years to divide the sum of the half net assets which was then the standard of assessment by the average cultivated areas of the years of which the average crop areas have been embodied in the produce estimate. This plan should *mutatis mutandis* be adopted where the record of the cultivated area contained in the past *milan-rakba* statements is fairly reliable, which is not always the case. All the steps of the process described above are exhibited in the form given in Appendix XII. It is, on the whole, to be preferred to that used in some settlements which showed under each crop not the actual acreage, but the percentage which that acreage bore to the total cultivated area. Where this plan was adopted the result was, of course, to give a produce estimate for 100 acres of each class of land, the 100 acres being an exact type of the whole cultivated area of that class. The product divided by 100 gave the half net assets rate, and this multiplied by the cultivated area gave the maximum assessment. In some recent settlements assessment rates have been framed for, and applied to, the average area of harvested crops under each class of land, and not the cultivated area under each class recorded in the *milan-rakba*. In very insecure tracts this is the better plan.

318. Entry in produce estimate of average crop areas.—The reforms introduced in 1885 with the object of securing accurate crop inspections and the continuous record of harvest results have a very direct bearing on the value to be attached to produce estimates. It is now possible to deduce the acreage under each crop from the figures for a considerable number of years, and, *prima facie*, the more harvests that can be brought into account the better. But no use should be made of any statistics whose substantial accuracy is doubtful. Enquiry and his own observation of the way in which the *patwaris* carry out the crop inspections at the beginning of settlement will enable an assessing officer to judge how far the figures given in the *jinsar* statements can be trusted. In a tract where the process of bringing waste lands under the plough is proceeding rapidly, or where the character of the cultivation has been changed, for example by the introduction of canal irrigation, attention must be confined to those recent years in which the conditions have been similar to those prevailing at the time of settlement. The object is to take the data of a period whose average results have been such as are likely to be repeated in the near future. The orders of the Financial Commissioner should be obtained at as early a stage as possible in regard to the cycle or period of years of which the average mature crop areas are to be taken as the basis of the produce estimates in the different *tahsils* under settlement.* In submitting his proposals on this subject the Settlement Officer should give figures for matured crops by assessment circles for each year of the expired settlement.

319. Character of harvests.—The grounds for considering the series of harvests from which the averages are deduced to be a fair sample of the ordinary fluctuations characteristic of the agriculture of the tract should be stated in the assessment report, and some account should be given of each of these harvests. This is specially important when the Settlement Officer finds that he can only rely on the statistics of a few years. He will find

*See paragraph 225.

some information regarding harvests which he has not himself observed in the reports which the Collector sends to the Director of Land Records with the half-yearly crop returns.

320. Failure to record *kharaba*.—Another point of importance is the degree of correctness with which the *patwaris* record the area on which the crops have failed to come to maturity (*kharaba*). To under-estimate this is certainly their tendency when they are left to themselves. To do so saves them trouble, and they have a notion that it is well to make the entry which may be supposed to be most favourable to the interests of Government. If a Settlement Officer is convinced that the failed areas have not been fully recorded, he must make allowance for this either in framing or in using his produce estimate. He should explain in his assessment report in what way he has made this allowance.

321. Irrigation entries in *milan-rakba* and *jinswar*.—Another difficulty in connection with these estimates arose from the disagreement between the record of land on the one hand and of crops on the other as irrigated and unirrigated. In the *jamabandi* and the yearly area statement (*milan-rakba*) all lands should be put down as irrigated which in the ordinary course of husbandry are watered from time to time, but at harvest inspections only those crops are entered as irrigated which have actually been watered. A very slight acquaintance with the agriculture of the Punjab will show how much this detracted from the worth of the produce estimate so far as it professed to show separately the rental of the different classes of land. In the unirrigated columns of the estimate thousands of acres of crops might appear which were actually raised on land which had been recorded, and would be assessed, as *chahi* or *nahri*. Occasionally in a season of drought irrigation may be pushed beyond its normal limits, and crops on *barani* lands be watered, but the usual effect on produce estimates of the different methods followed in preparing the area and crop statements was to inflate the rental of unirrigated and reduce that of irrigated lands. The discrepancy between the two systems of record often made it impossible to lay any stress on the produce estimate for each class of land as a separate item, but it did not seriously affect the trustworthiness of the aggregate of these separate estimates as showing what the value of the outturn of all classes of land was. There are, as will appear in the sequel, other ways of arriving at an estimate of the relative value of the various classes of land and of framing differential soil rates, and if, when all was said and done, the Settlement Officer made a mistake under this head, the people had an opportunity of correcting it when the demand was distributed over holdings nevertheless, it is very desirable that the produce estimate for each class of land should show all the crops grown on that class, and there is no great difficulty in excerpting the required information from the *khasra girdawari*. Orders were, therefore, issued for the amendment of the annual area statement by adding a new column to show "the total area of crops grown on each class of soil * * * irrespective of irrigation."* Settlement Officers will be wise not to rely on entries under this head in the area statements without having them carefully tested ; but when this process has been applied the annual averages

*Director of Land Records' circular letter No. 9, dated 6th July 1897. See column 11 of *milan rakba* statement.

of such entries for the years comprising the sanctioned cycle should be included in the statistics furnished with the assessment report. It may be observed that even with the aid given by the figures contained in the additional columns the calculation of accurate differential net asset soil rates is generally not practicable without resort to certain further assumptions and adjustments the nature of which depends on local conditions. As an example reference may be made to paragraph 33 of the Zira tahsil assessment report of 1912.

322. Fodder deductions.—In the drier parts of the Punjab, where rain crops are few and the fodder to feed the well bullocks must be grown on the well lands, a landlord must allow his tenants to devote part of the area to the raising of turnips, green wheat and *jowar* for their oxen. Of the crops grown on that area he receives no share, and they should therefore be omitted in calculating the rental. After a careful observation of local usages a Settlement Officer must make the best estimate he can of the crop areas to be excluded on this account. The actual amount a tenant is allowed to appropriate doubtless varies with the character of the seasons. Thus in his assessment report of tahsil Chiniot in the Jhang district, Mr. Steedman wrote—“Practically there is no limit to a tenant’s privileges in cutting *jowar* and wheat for fodder. I have always been given the same answer to my enquiries. A tenant ought not to cut more than so much, but in a year of deficient pasturage he cuts as much as is required to support his well bullocks.” It was formerly usual in produce estimates to exclude the value of the straw of grain crops, and Settlement Officers had authority for this practice in the 60th paragraph of Barkley’s edition of the Directions. But the proper course is to show in the combined produce and net assets estimates the value of the whole of the crops, both grain and straw, but to deduct before calculating the amount of the net assets all items of which the landlord does not take a share. It is always well to know what share of the gross produce the one-fourth net assets really represents.* In cases where the straw is divided it will often be found that the tenant retains a larger proportion of it than he does of the grain.

323. Difficulty of estimating average yield.—To estimate the average yield of each crop on the different classes of land in a tract as large as an ordinary assessment circle is a task of great difficulty. Since the attempt to record soils with any minuteness has been abandoned, it is quite usual to find all the land dependent upon rain in a large circle put into a single class. Obviously the thousands of acres so classified will vary widely in natural fertility, and the average outturn will be greatly affected by the degree of skill and industry possessed by the cultivators. The yield of different harvests also varies to an extraordinary extent, especially in the case of unirrigated crops. In essaying to make the best estimate in his power a Settlement Officer must be guided by the results of experimental cuttings, by his own observations and information gathered from trustworthy persons, by the accounts of land-owners or mortgagees, where obtainable, and by the yields assumed for similar tracts elsewhere.

* *Vide* last sentence of paragraph 7 of Appendix XX.

324. Crop experiments.—The defects of the system of experiments carried out under the orders contained in Financial Commissioners Book Circular XX of 1871 and the improved practice introduced by Colonel Wace in 1879 have been noticed in Chapter VI. The existing instructions on the subject will be found in Financial Commissioners' Standing Order No. 9-A, and in Appendix X. The quality of the experiment is more important than their mere number. No experiment should as a rule be accepted unless its selection has been approved after inspection by an officer not below the rank of tahsildar. An exception may be made, under the orders of the Settlement Officer, in the case of very experienced *najib-tahsildars*. The Settlement Officer and the Extra Assistant Settlement Officer should themselves see and approve of as many of the plots as possible, and accordingly the instructions lay stress on the necessity of the inspection of as many as possible of the fields selected by the Settlement Officer himself or the Extra Assistant Settlement Officer, and on the actual carrying-out of experiments being entrusted only to trustworthy subordinates. When inspecting a field the Settlement Officer should make a preliminary estimate of its outturn which he can afterwards compare with the results of actual weighing by the official in charge of the experiment. In using the results of crop experiments some allowance may be made for the fact that in fields selected for experiment less wastage is probably allowed to occur than in ordinary fields.

325. Eye should be trained to estimate outturn.—It is hopeless to make in the course of a settlement sufficient experiments to justify an assessing officer in accepting their average results without further enquiry as a true indication of the yield of crops. Experiments are only one among several guides in arriving at a conclusion upon this point. A Settlement Officer's power of making a reliable estimate of average yield for the purposes of the produce estimate largely depends on the degree in which his eye has been trained to appraise crops. When the *girdawari* is being made other work must give way, especially in the early stages of a settlement, to the supervision of the *patwaris* in this branch of their duties, and the assessing officer should make it his aim to get by personal observation a sufficient acquaintance with the state of the crops in every part of his charge, and some good general idea of the yield of the harvest. He should be constantly making his own mental estimates of the outturn of the crops which he sees in the course of his inspections and comparing them with those of respectable land-owners and of his own subordinates.

326. Yield of *dofasli* crops.—Care is needed in estimating the yield of the spring harvest in double-cropped land. The fact that a field bears two crops in the year is often not a sign of good soil or good tillage, but of the reverse. Any one who uses his eyes can see the miserable results which frequently follow from the common practice of sowing barley or *masri* after rice, and double-cropping in riverain lands sometimes merely marks the struggle to get the most out of a poor over-saturated soil. In hilly tracts, where maize is the great crop on manured homestead lands, the *rabi* crop which follows it is often very light. At the other extreme we have the heavy wheat crops raised after maize on richly manured well lands in Ludhiana or Jullundur.

327. Produce estimate of each harvest observed.—For every harvest which he observes a Settlement Officer should, if possible, prepare a produce estimate according to what he conceives to be the actual average yield of each crop in that particular season. If he does so, he will be less likely to make gross blunders in his final calculations.

328. Accounts of land-owners and mortgagees.—No opportunity should be lost of examining the accounts of large land-owners or mortgagees who collect in kind. It is sometimes possible to get valuable information from the rent realizations of estates under the Court of Wards, and occasionally a Settlement Officer may be able to refer to the results of *kham tahsil* management by Government. Where fluctuating (*batai*) and fixed (*chakota*) grain rents exist side by side, the amount of the latter per acre should be compared with the estimated amount of the former.

329. *Cancelled.*

330. Enquiry into prices.—A Settlement Officer must at an early stage of his operations obtain the sanction of the Financial Commissioner to the commutation prices which he proposes to use in the produce estimate.*

The object of the enquiry into prices is two-fold—

(a) to determine the commutation prices ; and

(b) to ascertain the general rise or fall in the prices of agricultural produce since the last settlement.

For the latter purpose the investigation must be carried further back than would otherwise be necessary.

331. Prices to be adopted.—For commutation prices we would use, were they ascertainable, the average prices which will be obtained for their crops by agriculturists from village traders during the coming settlement or, if its term is a long one, during the first ten or fifteen years of its currency. But eschewing matters of speculation† the only safe plan is to take the average of a sufficiently long period in the past, and assume that the range of future prices will not be dissimilar. Accordingly the rules under the first Punjab Land Revenue Act (XXXIII of 1871) required Settlement Officers to submit with their assessment reports a statement showing the changes in the value of produce during the last twenty years divided into quinquennial periods, and the 58th paragraph of Barkley's edition of the Directions, published in 1875, prescribes the use of the average prices of twenty years in the produce estimate. It is a mistake to lay down any general rule of this sort. In deciding what period should be taken for the calculation of averages much will depend on the past history of the district. If a tract formerly isolated has been recently opened up by the construction of a railway, and access to new markets has led to a large and apparently permanent rise of prices, it may be right to neglect the figures for the years before the change took place. But a Settlement Officer must be on his

*See paragraph 225.

†“ The fluctuations of prices are far too uncertain, and any conclusions as to their future course far too hypothetical, to form a safe basis for assessment ; and the furthest that it would be wise to go in reliance upon an anticipated rise is to use it as a justification for not going lower than actually prevailing rates ” (paragraph 3 of Government of India, Revenue and Agricultural Department, No. 1300—38-2, dated 8th May 1895—Revenue Proceedings, No. 28 of June 1895, compare paragraph 3 of Punjab Government No. 1068-S., dated 12th September 1895).

guard against that common weakness of the human mind which leads us to attribute to existing conditions a greater degree of stability than they actually possess. When high prices or low prices have ruled for several years we are too apt to assume a permanent rise or a permanent fall, and it is quite possible to mistake the effects of short harvests for those of extended markets. Once a firm grasp of the facts is obtained the matter is one for the exercise of common sense.

332. How far back history of prices should be traced.—The history of prices during the whole term of the expiring settlement must be traced in order to determine the rise or fall of agricultural values since the assessment under revision began to run. But it is well to carry the enquiry back to a period five years before its introduction. In this way we learn not only the prices at which the assessment has worked, but those which were present to the Settlement Officer's mind when he made it. The argument for enhancement to be drawn from a rise of values will be dealt with in a later chapter.

333. Scope of enquiry.—Instructions regarding the enquiry into prices will be found in Appendix XI. The commutation prices should be based on the prices which the farmer obtains for his produce. In many parts of the country he still sells on the spot to the village grain-dealer at rates fixed once for all soon after harvest. Subsequent fluctuations of the market do not affect him one way or the other. In examining shop-keepers' books in selected villages the transactions of the month in which the harvest rate is fixed should be scrutinized. The results of the inspection of grain-dealers' books should be compared with the harvest prices for each assessment circle reported by the field *kanungos* for entry in the circle note-books.* These should also represent the prices got by farmers from the local shop-keepers. The data for a series of years derived from the above enquiry are sometimes, except in the case of the chief crops, fragmentary, and the figures for different villages are occasionally conflicting. They should, therefore, be supplemented and checked by tabulating the harvest prices derived from the returns published in the Gazette, which will usually be a good deal higher than the village prices. An official record of the prices of agricultural produce has been made at first monthly, and afterwards fortnightly, in all districts ever since 1851, and tables showing the yearly average prices of the principal agricultural staples in each district were appended to the Financial Commissioner's Annual Revenue Administration Reports from 1856-57 to 1900-1901, and are now published in the yearly Season and Crops Report.

If it is found that in any tract most of the farmers take their produce to market towns and dispose of it there, the line of enquiry must be adapted to that state of things, and it will be necessary to make allowance for the cost of cartage and for any fees paid at the markets to agents, weighmen, etc.

334. Methods of reckoning prices.—Formerly the method of ascertaining the average price of any grain was to add together the number of *seers* per rupee at which it has was sold in each year and to divide the total by the number of years, of which the prices were tabulated. The result (so

*See paragraph 401, Land Administration Manual.

many *sers* per rupee) was entered as the price in the produce estimate. Mr. Francis pointed out that this method is arithmetically incorrect. Thus if the price of wheat in two years is Rs. 4 and Rs. 2 per maund, or 10 and 20 *sers* per rupee, respectively, the average price is Rs. 8 per maund, and, estimated in *sers*, is not 15 (as usually shown), but $18\frac{1}{2}$ *sers* per rupee. In the net assets estimates prices should be expressed in even annas per maund.

335. Exclusion of famine prices.—The prices of years of famine or severe scarcity should be excluded from the calculation in the case of crops grown on soils or classes of land of which the outturn is much affected by seasons of drought. But even when this has been done the remaining years will consist of seasons of very varying productiveness, and it must not be assumed that the bare average of the prices prevailing in them should necessarily be taken. Other things being equal, low prices mean good and high prices bad harvests. It follows that, while the average produce of two years is half of the total outturn of both, the average price cannot be got by a similar process; for the part of the whole produce sold at the lower rate is far greater, perhaps in the case of unirrigated crops three or four times greater, than the part sold at the higher rate. If we assume that the outturn of a field is in one year 10, and in the next 4 maunds, and that the prices of the two years are Rs. 2 and Rs. 4 per maund, respectively, the whole produce is sold at an average price of Rs. $2\frac{2}{3}$ and not Rs. 3. The old method of calculating prices, though arithmetically wrong, had the accidental merit of making some allowance for the low outturn in years of high prices.

336. Illustration from case of wheat and gram.—The greater the fluctuations in prices the less regard should be paid to bare averages. It is worthwhile to illustrate this by considering as typical cases wheat and gram. In the Punjab the former is either an irrigated crop or is grown where the rainfall is comparatively abundant or the land is kept moist by the neighbourhood of a river. Gram on the other hand is an unirrigated crop mostly raised in tracts of scanty and uncertain rainfall. The effect of the seasons on the area sown and the yield is of course great in the case of both crops, but it is far more sweeping as regards gram than as regards wheat. In a year of drought gram practically disappears in insecure tracts. Again there is a steady foreign demand for wheat, but practically none for gram. The result is that the fluctuations in the value of wheat are comparatively small, and it is rarely very cheap. One good season may send the price of gram down very low, while in famine years it may easily be dearer than wheat. If an acre of wheat yields 16 maunds in a good and 8 maunds in a bad year, and the price is Rs. 2 per maund in the former and Rs. 2-8-0 per maund in the latter, the true average price is Rs. 2-2-8, or very little less than the average of Rs. 2-4-0 calculated in the usual way. But suppose an acre of gram yields 8 maunds in a good season and nothing in a bad, and the prices are Re. 1-2-0 per maund in the former and Rs. 2-8-0 in the latter. The second figure is obviously of no use in framing an estimate of the average price the farmer receives, and it would be of very little use, if the field yielded one or two maunds instead of nothing at all. It follows that in fixing the commutation prices of a crop the Settlement Officer should carefully note how often in past years the price current has fallen *below* that which he proposes to adopt. The fact that the latter is less than the average deduced arithmetically will

not make the estimate a safe one, if the actual price is lower whenever the seasons are favourable.

337. Tendency to assume too low prices.—It must be admitted that, if we except some settlements made in the first few years after annexation, the prices assumed by Settlement Officers have generally been markedly lower than those which have prevailed for any long period during the currency of their assessments. This has been due to several causes. The general trend of prices since 1861 has been upwards, a fact which could not have been foreseen. Again, some officers in their desire to make cautious estimates included the figures for too many years, and even the very low prices which prevailed before 1860-61, in striking their averages, while others reached the same end by assuming prices a good deal lower than their data warranted. The determination of commutation prices is the most speculative part of the produce estimate, and caution is no doubt called for, but caution must not degenerate into anything which may fairly be described as playing fast and loose with facts.

338. Deductions on account of dues of village menials, &c.—We are now in a position to calculate the money equivalent of the total produce, and, when this has been done it only remains to estimate the value of the landlord's share, one-fourth of which is the maximum assessment. The rent is usually expressed in some simple fraction, one-half, two-fifths, one-third, &c. But it is customary before the land-owner and the tenant divide the grain on the threshing floor, to set aside a portion of it for payments to village artisans and menials and for charitable purposes. The amount varies greatly with the caste of the proprietors and the nature of the cultivation. It will usually be largest in the case of crops irrigated from wells. In making deductions on this account it must be remembered that only those payments must be considered which are made from the produce when the land is tilled by tenants. A landlord, who cultivates his own fields may find it convenient to employ reapers and to pay them by giving them a part of the crop, but it does not follow that he will allow a tenant to do the same. It is only when tenants usually engage reapers and are permitted to pay them out of the produce that any deduction should be made on this account. So far as the payments to artisans and menials are given for help in tillage, or for the supply or repair of agricultural implements, or in fact for any work subsidiary to agriculture done for the benefit of the tenant, they form part of the cost of production, and should be subtracted before calculating the rent. But when they are the reward of personal services rendered to the landlord, or of a purely charitable character, they should be left out of account. When we know the proportion of the crop payable to artisans and menials which can fairly be included in the cost of production and the fraction which represents the rent, it is easy to calculate the landlord's share of the gross produce. Thus, if the payments absorb 10 per cent. of the crop and the rent-rate is one-half the landlord's share is 45 per cent.

339. Batai share not always true measure of rent.—But the matter is not always quite so simple as would at first sight appear. Where landlords take their share by appraisement it is well to enquire whether the fractional share which is recorded as the rent with the consent of both parties is really taken. How are payments to artisans and menials provided for

in this case? It may be found, for example, that there is an understanding which is regularly acted on that one-half is to mean in appraisement, two-fifths. The tenant sometimes pays lower rates of *batai* for crops whose cultivation is expensive owing to the need of irrigation, manure, &c., than for ordinary crops; sometimes the rent-rate is the same, but the landlord meets part of the cost of production. Thus he may defray part of the cost of seed, or manure, or weeding, or he may maintain the woodwork of the well, or he may pay a share of the acreage duty on poppy, or of the water-rates in the case of canal irrigated crops. In Shahpur, where the rate for sugarcane as for other crops was one-half, Mr. Wilson found that the landlord met so much of the cost of cultivation that his real share of the total yield was only one-fifth. On the other hand, land-owners sometimes get payments in excess of their *batai* share under the names of *kharch*, *lichh*, &c., or on account of the whole or a portion of the canal advantage or canal owner's rate, and these must be included in the rent.

340. Village produce estimates.—In the village produce estimates the circle rates of yield and rent may be used. If an estate is above or below the average, the Settlement Officer will allow for the fact when using the estimate as an assessment guide.

341. Well and plough estimates.—So far as we have been dealing with produce estimates which treat as a unit the total area of each soil or class of land in an estate or assessment circle. It may be useful to work out a separate estimate for an ordinary well holding, actual or supposed. All crops raised within the well area, whether watered or not, should be taken into account. Two estimates may be framed, one on the supposition that the land is cultivated by tenants paying a share of the produce, the other on the supposition that it is tilled by the owners themselves with or without the aid of farm servants. In the latter case the deductions from the value of the gross produce in order to obtain the net assets will include reasonable interest on the initial cost of purchasing the bullocks, the expenditure on annual repairs and replacing of live-stock, the cost of seed, the wages of labour, &c. If the bullocks are also used for ploughing other lands their full value must not be debited to the well expenditure, and if the owners cultivate themselves a reasonable sum must be allowed as the price of their labour. Whether anything should be included in the account for interest on the capital sunk in the construction of the well depends on the question whether the concession of assessment at unirrigated rates allowed by the rules for the grant of protective leases (see Chapter XXIX and rules 24—28 of the rules framed under section 60 of the Land Revenue Act), is sufficient to cover interest charges and also to replace the capital within the period for which the concession is made. A plough estimate can be framed on the same lines after the average area worked by each plough has been determined, but it serves no very useful purpose.

342. Data of produce estimate uncertain.—It is well frankly to recognize the fact that a net assets estimate based on rent paid by division of crops rests on data of a somewhat uncertain character. With an improved system of record the average area of successful crops can now be determined with a fair degree of accuracy, but a good deal of doubt must surround the estimates of yield, however careful the observations on which they are founded.

The prices assumed must in the nature of things be speculative, and even the rent rates are subject to deductions, the real amount of which it is difficult to determine. There are indeed some deductions not yet mentioned to which it is impossible to assign any definite value. Who shall say how much of the growing crop the tenant and his family appropriate without the owner's leave? Or how much of the produce on an average is damaged by weather after the crop has been reaped, but before the grain is divided? In some parts of the province tenants are so much in demand that they can make pretty well their own terms, and can insist on receiving advances which the landlord often finds great difficulty in recovering. High rates of *batai* may sometimes be a measure, not of the real value of the land, but of the anxiety of landlord to protect himself against dishonesty on the part of the tenant. Or the rate may be what it is, not as the result of competition for land, but because the last native ruler claimed that particular share of the crop as his due. Even so its pitch is not without significance, for our predecessors had a very shrewd idea of what land could pay and still remain under tillage, and they varied their demands roughly in accordance with the productive qualities of different tracts.

343. Conclusion as to produce estimates.—But, while recognizing the defects inherent in produce estimates, a Settlement Officer should never forget that it is his duty to use all means at his disposal to make them as close an approximation to the truth as possible. In the process he will be led into lines of enquiry which would be most useful to him in assessment work even if no formal estimate were required, and the result of his labour will probably be an estimate to which he can point with some confidence as one among several guides to the determination of a fair demand. He will generally find that his estimates are more reliable indications of the relative assessable values of different circles and estates than of the actual assessable value of any one of them and show pretty clearly where there is most room for enhancement. But the uncertainty surrounding produce estimates shows how needful it is to make the best possible use of the data supplied by cash rents when any considerable portion of the area is let on these terms.

CHAPTER XX.—The Net Assets Estimates based on Fixed Cash and Grain Rents.

344. Importance of using cash rent data.—The evolution of economic money rents in the Punjab has been a gradual process, and there are still many parts of the country where cash rents other than the land revenue, with or without a small additional payment as *malikana* or proprietary fee, are too uncommon to furnish any guide to an assessing officer. Rents of this description have a historical origin, but their persistence in any part of the country may be a sign that the returns from tillage are there neither very certain nor very large: in secure submontane tracts it is observable that cash rents tend to be confined to inferior lands. The only districts in which economic cash rents furnish data for assessment, such as are often available in the United Provinces, are Gurgaon and Rohtak.* But in many tracts they now exist in sufficient quantity to be used as an assessment guide, and where this is the case they furnish evidence of the landlord's net assets and of the relative assessable values of different classes of land more direct and certain than any that can be drawn from fluctuating kind rents.

345. Soil rents and lump rents on holdings.—A primary division of cash rents is into rents paid on holdings containing only one soil or class of land and lump rents paid on holdings including several soils or classes. In some tracts the soil rents† mostly resolve themselves into a few simple *kanal*, *ghumao*, or *bigha* rates, in others the rates are so various as to defy classification. The soil rents and the lump rents should be analysed separately. When the former are numerous, and an examination of them has shown the proportion that exists between the rents for the different classes of land, the lump rents can be resolved into soil rents. Thus, if the proportion established between the separate soil rents is *barani* 100, *sailab* 125 and *chahi* 175, a lump rent of Rs. 48 paid on a holding of 12 acres, consisting of equal parts of *barani*, *sailab* and *chahi* land, can be resolved into the following soil rates :—

					Rs.
Barani	..	..	..	..	8
Sailab	..	..	..	..	3 $\frac{3}{4}$
Chahi	..	..	..	..	5 $\frac{1}{4}$

This seems to be the best way of treating such rents when they are too common to be neglected altogether, but it must not be forgotten that the deduced rates are not actual, but assumed rents. General soil rents can be

*For the quinquennial period ending June 15th, 1927, the land held by tenants-at-will on cash rents was 58 per cent. in Gurgaon district, between 41 to 50 per cent. in the districts of the Muzaffargarh, Ludhiana, Mianwali, Rawalpindi and Rohtak, 30 to 39 per cent. in Dera Ghazi Khan, Jhelum, Sheikhupura, Jullundur, Karnal, Amritsar, Hissar and Lyallpur, 20 to 27 per cent. in Gujranwala, Shahpur, Hoshiarpur, Ambala, Montgomery, Guddaspur and Lahore, while in the districts of Attock, Multan, Jhang, Gujrat, Ferozepore and Sialkot it was only 10 to 17.

†For the sake of convenience the phrase "soil rents" is used in the chapter to include rents paid on different classes of land as well as rents paid on different soils properly so called.

obtained by combining the results of the separate analysis of soil and lump rents, regard being of course paid to the area of each class. In the annexed example it is supposed that there are 6,000 acres held in separate soil rents amounting to Rs. $9\frac{1}{2}$ and Rs. $6\frac{1}{2}$ in the case of *barani* and *chahi* lands, respectively and that holdings containing mixed soils with a total area of 4,000 acres are let for Rs. 17,000 :—

Separate soil rents.				Lump rents.			Total rents.		
Class.	Acres.	Rate Rs.	Rent. Rs.	Acres.	Rate. Rs.	Rent. Rs.	Acres.	Rate. Rs. A. P.	Rent Rs.
Barani ..	5,000	$3\frac{1}{2}$	17,500	1,500	..	..	6,500	3 2 6	20,515
Chahi ..	1,000	$6\frac{1}{2}$	6,500	2,500	..	..	3,500	5 13 9	20,485
Total ..	6,000	4	24,000	4,000	$4\frac{1}{2}$	17,000	10,000	4 1 7	41,000

The proportion between the *chahi* and *barani* rent rates in column 3 is 13 : 7. To obtain the *barani* rate in the penultimate column convert the total *chahi* area of 3,500 acres into *barani* by multiplying by 13 and dividing by 7. The product is 6,500. Adding this to the similar area of 6,500 recorded as *barani* we get 13,000 as the divisor and the dividend is the total rent of Rs. 41,000. This gives a *barani* rent rate of Rs. 3-2-6, and the rental of 6,500 acres at that rate is Rs. 20,515. The balance, Rs. 20,485, is the rental of 3,500 acres of *chahi* land and the *chahi* rent rate is therefore Rs. 5-13-9. If there are three classes of land and the proportion between *chahi*, *sailab* and *barani* rent rates in column 3 is 13, 9 and 7, the *chahi* and *sailab* areas can first be converted into *barani* and the *barani* rental deduced by the above process. The balance of the rent can be distributed between *chahi* and *sailab* by repeating the same process.

346. Arithmetical average may be misleading.—So far we have dealt merely with such an analysis of recorded rents as any clerk in an office might make. But this by itself is of little value and may be positively misleading. When employing cash rents as an assessment guide, a Settlement Officer is seeking to determine the fair renting value of a whole estate or assessment circle from the rents shown in the *jamabandis* as paid by tenants-at-will for a part, and sometimes a comparatively small part of the cultivated area.

347. Tests which rents used must satisfy.—Before he can do so with any confidence he must be prepared with answers to the following questions :—

- Are the rents correctly recorded ?
- How far do they fluctuate with the rise and fall of prices ?
- Are they paid in full and with regularity ?

- (d) How far is allowance made for fallow areas ?
- (e) Is the land paying cash rents a fair average of its class ?
- (f) Are the rents in fact, to use the phrase employed in the settlement instructions, " full fair rents " for the land for which they are taken ?

348. Careful scrutiny necessary.—No reply to these questions and especially to the last two, is possible without a careful scrutiny of rents as each village comes under the Settlement Officer's inspection. This duty is carried out very thoroughly in the United Provinces, where cash rents are much more common than in the Punjab, and where well nigh the beginning and end of a Settlement Officer's task is to make by the help of cash rent data such a valuation of every estate as will enable him to determine its fair rental. To accomplish this he must ascertain what the " prevailing " rent rates are for all classes of land for which separate revenue rates will be proposed, and apply the rates to the whole cultivated areas of these classes. The " prevailing rate " is defined as " the average rate actually paid on any class of land deducting those fields which pay an abnormally high or low rate." There are three steps in the process, namely, the recognition in the record of distinctions of soil or class which are usually accompanied by marked differences of renting value, the correct record of the rents actually paid, and the elimination of rents which are shown by enquiry on the spot to be clearly abnormal.

349. Procedure in United Provinces.—The different soils in an estate usually lie in blocks, and in the United Provinces the limit of each block is graphically shown on the village map. The rate of rent paid for each field let to tenants-at-will is also sometimes entered in the map, and this plan greatly assists the Settlement Officer's scrutiny of the rent data. When inspecting an estate he must satisfy himself that the limits of the various blocks have been correctly laid down, must test the accuracy of the rent entries, especially where the rate appears to be very high or very low, must discover the reasons for apparently abnormal rents, and finally, rejecting such rents as " are abnormally high or low," must determine the prevailing rate for each class of land in the village. By collating the results for the different estates in a circle or *pargana*, he at last makes up his mind as to the rates which may be accepted as fair circle or *pargana* rent rates for each class of land.*

350. First three questions referred to above.—Settlement Officers must be on their guard against false entries of rents. If the land-owners suspect that cash rents are being used as an assessment guide, a combination to procure an untrue record of them is possible. Attempts of this sort will fail if the annual papers have been carefully prepared in the interval between two settlements, when landlords are under no temptation to state their rents at less than their actual amounts.

The effect of fluctuations in prices on cash rents has not yet been investigated in the Punjab, but it may be doubted whether it is at all rapid.

*See the 17th of the United Provinces Rules for the guidance of Settlement Officers, 1875, quoted on pages 113-14 of Vincent Smith's Settlement Officers' Manual.

The question whether the recorded rents are collected in full in bad seasons must not be overlooked. This probably depends more on the demand that exists for land on the part of tenants than on the security or insecurity of the outturn. Where the demand is keen, rents may be paid with wonderful regularity in the worst of seasons, or where this is impossible and the land is abandoned, it may be customary before re-entry to pay up all arrears.

351. Question whether leased land is a fair sample of its class.—

The question whether the leased land is a fair sample of its class must be a very difficult one where, as has often happened in the Punjab, all soil distinctions other than those based on the presence or absence of irrigation or inundation have been given up. As already noted in Chapter XIII, where it is intended in assessment to lay much stress on cash rent data, a somewhat more minute classification will often be found expedient. But even if this is adopted, the question is one to which a Settlement Officer must give special attention in his village inspections. If the land-owners are themselves industrious husbandmen, it may be found that they only let the worst patches of land in the village. Proprietors often prefer to take kind rents where the produce is secure, and only accept cash where it is uncertain. But careless owners may let their best lands because they are unwilling themselves to undertake the hard work required for the cultivation of the most valuable crops. And the fact has to be remembered that many landlords are mortgagees, and the tendency is for money-lenders only to grant loans on the security of good land. Land is sometimes rented only for one harvest. The rents must in that case be rejected as an assessment guide unless the usual system of tillage is to leave the land fallow in the other harvest.

352. Elimination of abnormal rents.—The question of the elimination of abnormal rents is a very delicate one. To exclude rents whose very form suggests that they are not true economic rents is indeed easy. Rents consisting of the land revenue, with or without a small additional payment as proprietary fee, are of this class, and it is only in exceptional circumstances, where, for example, the revenue is high and the leased land poor, that such a rent may be a true economic rent. Where such circumstances do not exist these rents may be at once rejected. But it needs a very nice discretion to go further, and, by sifting out normal and abnormal rents, to reach a "prevailing rate" for each soil in every estate, and finally in a whole *pargana* or assessment circle, as a Settlement Officer is required to do in the United Provinces. If it is to be done at all, the only possible way is to carry out the operation village by village on the spot. Where it is proposed to lay much stress on cash rents as an assessment guide, and they cannot be resolved into a few common *kanal* or *bigha* rates, this is the only procedure likely to yield any solid results. At present where the cash rents are at once numerous and various the data presented in an assessment report may only serve to confuse the mind. It may be clear that, as they stand, no reliance can be placed upon them as assessment instruments, but there are the strongest objections to any attempt to improve them by eliminating rates because on paper they look abnormally high or low. If cash rents are not paid on a large area, and it is only proposed to use them

as throwing a side-light on an assessment confessedly based on other data, a less detailed examination than is required in the United Provinces will suffice. If the Settlement Officer thinks that the average recorded cash rents applied to the whole area would give a false idea of the true renting value of the land, it will be enough for him to explain the general reasons which have led him to that conclusion. The plan followed in the United Provinces implies that great reliance is placed on the judgment of the Settlement Officer. If the officer under whose immediate control the Settlement Officer works is vigilant, he will find no great difficulty in satisfying himself by testing his subordinate's proceedings in a few estates on the spot whether this confidence is deserved. And it behoves the assessing officer to explain his procedure exactly in his assessment report, and, comparing his corrected rent rates with those representing the bare average of all the cash rents except those whose form by itself suggests that they are not economic, to show what proportion of the rents he has excluded from his calculations and for what reasons.

353. Examples of abnormal rents.—A certain proportion of the rents he will reject as clearly privileged, being paid by relations and dependents who are allowed to till patches of land for more or less nominal payments. He may also find that some of the rents in his village list are paid for odds and ends of very inferior land, and, though fair in themselves, are useless for general assessment purposes. But the question of the exclusion of rents because they look very high is more difficult. A Settlement Officer in the Punjab is allowed a considerable discretion to deviate from the estimated standard revenue in actual assessment, and the cash rent estimate will rarely be his only guide in calculating the net assets. It is therefore a safe rule to decide all doubtful cases by retaining the rent. But rates so exorbitant as to be plainly no index of the fair rental of the land should be rejected. No definite rules can be laid down. In an estate where the bulk of the holdings are too small to support their owners, the latter will sometimes pay very extravagant rates for a little extra land. And estates and holdings may be found which are notoriously rack-rented. Government will not take one-fourth of a rack-rental as land revenue even from the rack-renting landlord,* still less can it use rack-rents as the basis of an assessment to be paid by land-owners who till their own fields. But in many estates it will probably be found that customary rent rates for different classes of land are recognized and that most of the actual rents conform pretty closely to these rates.

354. Comparison of produce and cash rent estimates.—Further instructions regarding the elaboration of the cash rent estimate will be found in paragraphs 4, 5 and 6 of appendix XX. Its results should be compared with the produce estimate, and an attempt made to trace the causes of any large discrepancies between them. If a Settlement Officer has made a careful study of the causes which have determined the pitch of cash and kind rents, respectively, in the tract under assessment, he may be able to furnish a clue to the reason of variations which at first sight appear

*See Sir J. B. Lyall's remarks on the Hissar Assessment Report in Revenue and Agricultural Proceedings, No. 12, for November 1890.

very curious. It may be found sometimes in historical rather than in economic causes. Finally he should endeavour to arrive at a definite estimate of the "true" net assets of the assessment circle concerned on the lines indicated in paragraphs 8 and 9 of appendix XX.

355. Fixed grain rents.—*Chakota* rents include lump grain rents and rents consisting of a fixed amount of grain, almost invariably wheat, in the spring, and a fixed sum of money in the autumn harvest. This form of rent is often met with in some of the central districts, and it is in favour with mortgagees. *Chakota* rents are usually pretty full rents. They are useful as a check on the produce estimates, especially in respect of the assumed yield of wheat, and, where sufficiently numerous, may make the basis of a separate net assets estimate. It will be well to enquire whether they are as a rule collected in full in bad seasons.*

*As pointed out in Chapter XVIII ordinary lump cash rents are in some places known as *chakota*.

CHAPTER XXI.—Miscellaneous Sources of Income connected with Land.

356. Sayer income.—So far we have only been considering the agricultural rental of the soil, but the proprietors may, in addition, derive an income from the spontaneous products of the waste and cultivated lands, from the leasing of water power or the right to extract saltpetre from the soil, &c. All such items of profit over and above the agricultural rental are known in settlement language as *sayer* (from the Arabic word *sa'ir* meaning remaining over) or *siwai*. If they are of any importance, they must not be neglected in calculating the net assets. In pastoral tracts it is only possible to make a rough estimate of the average net receipts from the sale of live-stock, *ghi*, hides, horns and wool. In a country where the seasons are very capricious all income of this sort is of necessity extremely fluctuating. It may be part of the rural economy to drive the cattle away during part of the year to tracts where pasturage has to be paid for. Allowance must also be made for the labour employed on rearing and tending the cattle and for the extent to which they are fed on agricultural produce. Where land-owners let large blocks of pasture land, the rents they get will be found too high for the calculation of rent rates for the whole uncultivated area, for grazing let in this way is usually of a superior class. The rents paid to private owners may be compared with the annual sums for which Government waste in the same neighbourhood is leased. In some pastoral tracts residents who are not proprietors pay a poll tax (*ang* or *bhunga*) at fixed rates for different kinds of cattle. An application of these rates to the whole of the village cattle is a rough, but useful, indication of the annual value of the grazing. The State usually waives its claim to share in the petty cesses referred to in paragraph 94, which land-owners have sometimes a customary right to levy from the other inhabitants of the village. But in some tracts, especially in the hills, the seigniorial dues in money or labour taken from tenants form a very large addition to their rents, and may well be taken into account when deciding the pitch of the assessment.

CHAPTER XXII.—Reasons for deviating from the One-fourth Net Assets Estimate in Assessment.

357. Uncertainty of estimates of net assets.—It has been shown that the difficulty of framing a trustworthy net assets estimate in the Punjab is great. The produce estimate involves a chain of assumptions, and a flaw in any one of the links will *pro tanto* vitiate the calculation. The paucity of cash and *chakota* rents will often make it hard to rely on them as assessment instruments, and the questions whether the land on which they are paid is of average quality and whether any given rent has passed the bounds of a full fair rent and become a rack-rent are very nice ones for decision. On this ground alone some divergence from the one-fourth net assets estimate in actual assessment may in any particular case be justifiable.

358. The standard in itself sometimes too high.—The standard of assessment has recently been lowered by the Land Revenue (Amendment) Act of 1928 from one-half of the net assets to one-quarter. No experience has yet been acquired of the working of this standard, but the spirit of moderation and firmness in which the old assessments were determined shall continue to be the guiding principle in future as well, and the following, which was originally written about the half net assets standard, *mutatis mutandis*, still holds true :—

“ But the best opinion in the Punjab has gone further, and held that the standard of half net assets deduced from the rents paid on a comparatively small area may in itself be too high for assessing land mostly tilled by peasant proprietors.* It is one thing to claim as revenue half the well ascertained rental of a big land-owner, and quite another to argue that half the rent paid on, say, 20 per cent. of the area of a large tract, is a fair criterion of what a host of small farmers cultivating their own ancestral fields can pay. Where the population is dense, and there is keen competition for land among owners, who have not enough to fully employ their ploughs and to feed their families, and among tenants who are in a still worse strait, rents may be forced up to a height which makes them dangerous assessment guides. It is a striking fact that for two-fifths of the land paying rent by division of crop in the Punjab the landlord's share is recorded as half the produce. Small farmers who let any little surplus land they have are hard landlords all the world over, and, the better husbandman a man is himself, the more likely is he to rack-rent his neighbour. It is notorious that Jats when they are in a position to let land are exacting landlords. It may be urged that the Sikhs often took half the produce as revenue, and that half of a rental consisting of the same proportion of the crop ought not to be an excessive demand. But the Sikhs very commonly took the share of the State by appraisement,

*For opinions expressed by Sir Robert Egerton, Sir W. G. Davies, Colonel Wace, Sir J. B. Lyall and Sir Dennis Fitzpatrick reference may be made to Revenue Proceedings for November 1876, page 625 ; April 1882, page 142 ; June 1882, page 282 ; May 1885, Appendix I, paragraph 7, of Financial Commissioner's Review of Hoshiarpur Assessment Report ; July 1888, page 300 ; July 1891, page 98 ; November 1891, page 142 ; November 1892, page 182 ; August 1893, page 158.

and half by appraisement was something very different from twenty seers in the maund.* It may be said that the Settlement Officer can eliminate rack-rents and only use the residue as the basis of his half net assets estimate. But this process becomes impossible when excessively high cash rents are not the exception but the rule, or where the pressure on the tenant takes the form of a severe current rate of *batai*. It behoves an assessing officer to make a very careful study of the historical and economic causes which have determined the existing state of the rents in his district, to mark how far custom has yielded to competition as the determining factor, and, where the latter has full play, whether it has forced the tenant to accept very severe terms. It is the wish of Government to fix an assessment moderate enough to ensure the prosperity and development of the country, but not so light as to encourage sloth and bad farming. It is also desirable that some measure of equality in the pressure of the demand in different parts of the country should be preserved. This would be impossible if the assessments were to be based solely on the rent data. The degree to which rents have ceased to be customary varies greatly in different parts of the country. Where land is abundant and tenants are few, a case can easily be imagined in which the rent statistics blindly followed would enforce a needless sacrifice of revenue. An actual instance of the kind will be found described in Sir J. B. Lyall's remarks on the assessment of the Kaithal *tahsil* in the Punjab Revenue Proceedings for November 1888. Two rents, both truly the product of economic causes, may differ much in severity. No single fraction of the gross produce can be a fair measure of the Government demand everywhere. But an assessing officer should always have before his mind, and should notice prominently in his assessment reports, not only the share of the net assets, but also the proportion of the whole outturn of each assessment circle which he is proposing to absorb in the Government demand. This is specially necessary when the assessment of similar tracts in which the rent rates differ are compared."

359. Other matters besides rent data must be taken into account.—The discussion of the use to be made by a Settlement Officer of his rent data is now complete. It has shown how necessary it is in the Punjab to pursue also that other line of enquiry which, in considering how far an existing assessment can be enhanced or must be reduced, regards not its relation to a theoretical standard, but its working and effects as shown in the past fiscal history and present circumstances of the estate or circle, its suitability or unsuitability when first imposed as evidenced by the ease or difficulty with which it was paid, the grounds for raising it furnished by the increase of resources which has occurred since last settlement, its pitch as compared with the demand paid successfully in other similar tracts and estates, and the obstacles to largely enhancing it which the caste and ancestral customs of the land-owners, the smallness of their holdings, and other practical considerations may oppose. The next two chapters will deal with matters other than rent, which data should be taken into account in framing an assessment.

*See Prinsep's Sialkot Settlement Report, paragraph 65.

CHAPTER XXIII.—General Considerations affecting the Amount of the Assessment.

360. General considerations affecting assessment.—The enquiry which is concerned with what are vaguely termed “general considerations” does not ask how far the existing demand must be enhanced or reduced to make it conform to the standard of one-fourth net assets, but how far it can be enhanced or must be reduced so as to secure to the State the highest revenue which is compatible with the prosperity and contentment of its subjects and the continued extension and improvement of cultivation. The bearing of “general considerations” on the determination of the land revenue to be paid by an estate was recognized in the seventh of the Assessment Instructions of 1893, revised in 1914, which provided that “the assessment of an estate will be fixed *according to circumstances*, but must not exceed half the value of the net assets.” The lowering of the standard of assessment due to the recent legislation has lessened the force of the considerations suggesting moderation in assessment, but the general principles still apply.

361. Fiscal history to be studied.—When the problem of assessment is approached from this side a survey of the fiscal history of the tract becomes indispensable. Lessons are to be learned from all its past land-revenue settlements, and also, it may be, from the fiscal arrangements of former rulers. But these have probably for the most part been weighed and recorded, and naturally a Settlement Officer's chief concern is with the character and working of the assessment which he is revising, and the growth or decay of the resources of each estate and circle since it was introduced. If the past settlement was originally fair as between the State and the land-owners, and as between village and village, the practical force of the argument for enhancement grounded on an increase of resources is clear. But not only the fairness or unfairness of the result, but the method by which it was reached, is important. A Settlement Officer has to build on another man's foundation, and must plan his house accordingly. Even mistakes in the assessment of particular soils or estates may have to be accepted as matters which cannot be wholly put right at a revised settlement.

362. Character of assessment under revision.—In weighing the merits and defects of the past settlement, it is necessary to trace the way in which the assessment was determined, especially the use made of soil distinctions and of revenue rates, the incidence of the demand when first imposed on the whole cultivated area and on different classes of land, its distribution over estates, and the ease or difficulty of its collection, especially in the early years of its currency before any great change in the resources of the land-owners had occurred.

363. Distribution over estates and holdings.—The distribution of the assessment over estates and holdings is often more important than its gross amount. Nothing gives more trouble than the reassessment of a tract in which the land-revenue demand has been from the first, or has become by force of circumstances, grossly unequal. A high assessment justly

distributed over estates and holdings is less oppressive than one which is moderate as regards its gross amount, but unfair as regards its distribution.

364. Past fiscal management.—The history of past revenue collections, the extent to which resort to the coercive powers conferred by the Land Revenue Act has been necessary, and the frequency or infrequency of remissions and suspensions should be considered. An endeavour should be made to ascertain whether, speaking generally, the fiscal management has been prudent and considerate, and whether relief has been afforded in seasons when it was required.

365. Cesses.—The history of the cesses paid by land-owners in the Punjab has been given in Chapter VII. They are levied at so much per cent. on the land revenue. Recent remissions of taxation have reduced the burden very considerably, and cesses now usually amount to a surcharge on the land revenue of between 13 and 15 per cent. This is exclusive of any amounts raised for village police and common village expenses. The claim of the State to one-quarter of the net assets as land revenue is not affected by the levy of cesses, and no man has a right to have his assessment lowered because it and the cesses together absorb 33 or 34 per cent. of the rental. But, where holdings are small, and the margin left after providing a bare livelihood for the land-owner and his family is usually slender, the fact that a large sum is paid on account of cesses, and that it increases *pari passu* with the increase of the land revenue, may undoubtedly limit the amount of enhancement which can prudently be taken.

366. Survey of economic history and condition of each estate and circle.—In studying the history of an estate or any area for assessment purposes, a Settlement Officer cannot confine his attention to the way in which its land revenue and cesses have been assessed and collected. He must embrace, in his enquiry all evidences of the growth or decline of the resources of the land-owners. Nothing in the past which has had a lasting effect, good or bad, on their well-being, and nothing in the present which shows their power to pay a larger assessment, or their inability to bear existing burdens and prosper, should be overlooked. In fact, a survey of past economic history and present economic conditions as complete as time and opportunity permit should be made in the case of each estate and circle. A prudent man will not forget that "human beings, and not merely acres of land" are being assessed, and will not refuse to consider any difficulties which the character and ancestral habits and customs of the land-owners may put in the way of very large enhancements.

367. Increase of cultivated area and of means of irrigation.—Obviously one of the best reasons for raising the revenue is an increase of the cultivated area. The extension of artificial means of irrigation is also a ground for enhancement, care being taken to ensure to the land-owner a fair return for any capital sunk in improvements. Difficulties in comparing the cultivated area of different settlements arise from the fact that in the earlier Punjab settlements "cultivated" and "new fallow" did not mean exactly what they do at present, a good deal of land now shown as cultivated being then classed as *jadid*. *Mafi* plots and the *sir* land of *jagirdars* were formerly excluded from the assessable area. More accurate measurements will account for some additions to the recorded

cultivated area. If there has been a real increase of any importance, its position can be pointed out on the map.

368. Means of checking survey figures.—Where cultivation is of a very fluctuating character, as, for example, where it depends on uncertain floods, the extent of the cultivated area will vary greatly according to the season in which the measurements happen to be made. In such cases survey statistics by themselves may lead to wrong conclusions, and they should be viewed in connection with the indications furnished by the growth or decline of population, and more especially by the crop returns for past years. In fact, in such cases it is often prudent to frame assessment rates not for the recorded cultivated area of any particular year, but for the average area of matured crops in a series of years. An increase in the recorded *chahi* area should be checked with the figures, showing the number of wells at work at the two settlements.

369. Character of new cultivation.—The character of the new cultivation as compared with the old should be noticed. It is well, as already hinted, to fix its position by comparing the former and present maps, and also to see it when the village is inspected. Naturally the lands which are first brought under the plough are the best, or at least the most favourably situated or the most tractable. The effect of the spread of cultivation on the older lands is sometimes injurious. In very dry tracts, where successful tillage largely depends on drainage from the surrounding waste, the breaking up of the latter increases the insecurity of the crops.

370. Exhaustion of soil.—Assertions that the soil has become exhausted must be received with caution, but in the case of some light sandy lands in the Punjab it is undoubtedly true. Settlement Officers should now be able to turn with some confidence to the annual crop statements for proof or disproof of alleged deterioration of the older cultivation or inferiority of the new, and, on the other hand, for evidence of improved farming. Unfortunately before 1885 we have few trustworthy returns based on harvest inspections, and, as explained in Chapter VI, the crop statistics of settlements made before 1880 were excerpted from the measurement *khassras*, and are not really accurate. Still an attempt to compare the former and present crop statements should be made. Wide differences between them will indicate actual changes of agricultural practice, though smaller variations may be explained by the improved system of record.

371. Fluctuating nature of income derived from land.—But the great advantage derived from the continuous record of the crops which ripened and of the area sown which yielded no harvest is the light it has thrown on the extremely fluctuating nature of the income derived from land in many parts of the country. Though the *jinsuar* returns are imperfect instruments for measuring the insecurity of the harvests, they at least supply a Settlement Officer with evidence of ascertained facts for a considerable number of years wherewith to supplement and correct the impressions made on his mind by his own partial observation of the harvests of a few seasons. Where the land-owners are small farmers living from day to day, it is practically impossible, other things being equal, to impose a fixed land revenue of equal amount on two tracts of equal average assets if the yearly variations from the average are in one case small and in the other extreme.

Elasticity of collection is only a partial remedy for the caprices of the seasons, and it is one of uncertain operation. While the demand can absorb a greater share of the gross produce in a secure, than in an insecure, estate or circle, the revenue in the latter may often approach more closely to the assets standard than in the former. High rent rates and very small holdings are two great obstacles in the way of assessing up to the standard, and these are more likely to be met with in a secure, than in an insecure, tract.

372. Comparison of cultivated and average crop areas.—Tables showing in percentages on the cultivated area the average acreage under each of the principal crops and the average acreage on which the crops sown fail to come to maturity are very useful as a rough comparative test of the value of the produce of different soils and classes of land and of different estates and assessment circles. In assessment work it is well to pay more heed to acres of crops than to acres of land, and a prudent Settlement Officer will think more of the rate at which his proposed assessment in each case falls on the average area of crops harvested than of its incidence on the recorded cultivated area. This is specially true in the case of tracts whose harvests are of an uncertain character.

373. Rainfall.—In connection with the crop statistics the returns which show the amount and distribution of the rainfall in different parts of the district should be studied. The variations in the rainfall, even within the limits of a single district, are sometimes very remarkable, and the total amount received in any year is less important than the time at which it came.

374. Rise of prices.—The subject of prices in its relation to the calculation of a full net assets assessment has been discussed in Chapter XIX. There remains for consideration the practical question of the effect of a permanent rise of prices on the ability of the land-owners to pay an increased revenue. If the demand fixed at last settlement was paid without difficulty at a time when prices were much lower than they now are, or will probably be in the future, there are substantial grounds for urging that it is capable of considerable enhancement. One must decide, in the first place, What has been the general rise of prices? What are the two periods whose average prices should be compared? And how is the general rise to be determined, seeing that the value of each crop has risen in a different proportion?

375. Prices to be compared.—The commutation prices used in the produce estimate must be accepted as the average prices at which the new assessment will have to work. The orders of the Government of India require that these shall be compared with the prices assumed by the officer whose assessment is under revision, or, if he left no record of the prices on which he based his assessment, with the prices prevailing for a reasonable period before the settlement.* In using such a comparison as an aid, it is of course

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*Government of India, Revenue and Agricultural Department, No. — — —, dated 24th November 1894, in Revenue Proceedings for January 1895, and Government of India, Revenue and Agricultural Department, No. — — —, dated 8th May 1895, in Revenue Proceedings for June 1895.

assumed that the last assessment would have proved a fair one if the prices adopted by the Settlement Officer in his produce estimate had in the event turned out to be the prices at which his assessment had to work. The orders contained in Punjab Government letter No. 132, dated 25th June 1895, also directed that a comparison should be made between the commutation prices and the lowest prices which prevailed during the currency of the expiring settlement. But it was pointed out in the Lieutenant-Governor's remarks on an assessment report of the year 1898 that this particular method of dealing with the rise of prices is open to the criticism that it compares actuals with estimates.* It is always desirable to consider carefully the lowest and highest prices which prevailed for any length of time during the currency of the expiring settlement, and to mark how the settlement worked when prices were most unfavourable. If the assessment stood the test of low prices, while its incidence had not been lightened by large extensions of cultivation or irrigation, it may fairly be held that the demand was from the beginning a lenient one, and the argument based on the rise of prices can be used with confidence.

376. Calculation of general rise of prices.—An easy way of calculating the general rise of prices, which was employed by Mr. Francis, is shown in the following diagram. It is assumed that 90 per cent. of the crops consist of maize, *jowar*, wheat and gram. It is unnecessary to take account of crops covering small areas unless they are very valuable, as, for example, sugarcane :—

Crops.				Percentage of total area of crops.	Rise of price per cent.	Multiple of column 3 by column 2.
Maize	..	..	..	12	20	240
Jowar	..	..	..	30	12	360
Wheat	..	..	..	40	35	1,400
Gram	..	..	..	8	25	200
Total				90	24½	2,200

The total of column 4 divided by 90 gives the general rise. If the cropping of a *tahsil* is simple enough to enable one to make a rough general estimate of the yield per acre of each crop, the statement can be amplified and improved.

Crops.				Percentage on total area of crops.	Yield per acre in maunds.	Total yield in maunds.	Rise of price per cent.	Multiple of column 5 by column 4.
Maize	..	..	..	12	16	192	20	3,840
Jowar	..	..	..	30	5	150	12	1,800
Wheat	..	..	..	40	12	480	35	16,800
Gram	..	..	..	8	7	56	25	1,400
Total				90	..	878	27½	23,840

Here the general rise is got by dividing the figure in the last column by that in column 4.

The general rise evidently varies from village to village and from circle to circle. But the argument founded upon it can only be used in a broad and general way, and it is enough to calculate the rise for a *tahsil* as a whole unless the variations in the crops grown in different parts of it are extreme. Land-owners grow some crops mainly for their own consumption and others mainly for sale, and most regard should be paid to a change in the prices of the latter.

The general rise of prices should be calculated by the above process and noticed in the assessment report both as regards the commutation prices assumed at the new settlements compared as well as for the prices actually prevailing at those times, respectively. For the latter purpose the averages of Gazette prices for the quinquennium or decade preceding a settlement may be taken as the normal actual prices at that settlement.

377. Effect of rise of prices in case of small proprietors.—

If land is in the hands of a few proprietors and cultivated by tenants, it may be found that a rise in the prices of agricultural produce, unless the cost of production increases in a greater proportion, is followed pretty closely by a corresponding advance of rents. Indeed, where rent is taken by division of crop, the rise is automatic. In such circumstances there is little difficulty in claiming for the State the enhancement which the increased value of its share of the produce properly demands. But, where the land is parcelled out among a host of peasant proprietors who till their own fields, difficult questions arise. So far as the small farmer consumes his own crops or lives on advances of grain which he repays in kind with heavy interest at harvest time, any change of price is a matter of indifference to him. It is only as regards the surplus available for sale that a rise in value helps him. Where the agricultural population is sufficient, but not redundant, where it is energetic and provident, and the returns to its labour are fairly secure, it reaps the full fruits of the opening of new markets and a rise in prices. In other tracts, owing to want of thrift or overpopulation, the benefits derived from these changes are much smaller and not nearly so widely spread; in some they are only enjoyed by exceptionally careful or fortunate farmers. Prudence should deter a Settlement Officer from treating the rise of prices as a justification of an equal enhancement of the revenue in these varying circumstances. But, on the other hand, there is some danger that sympathy may lead him to sacrifice too much of the just claims of the State, unmindful of the risk of fostering economic evils by undue leniency.

378. Markets and means of communication.—Closely connected with the subject of prices is that of improvements in communications and facilities for bringing grain to market. The boon which these confer on the community as a whole is sometimes associated with local drawbacks. Diversions of traffic due to the opening of railways may deprive the land-owners of particular tracts of some of their chief sources of profit. And the neighbourhood of a thriving market town puts special temptations in the way of the population of the surrounding villages so that what ought to be an advantage may become a snare.

379. Statistics of transfers.—In the fiscal history of an estate a prominent place must be given to the extent and causes of alienations, the times when they occurred, the classes to which the new owners and mortgagees belong, the prices realized in the case of sales and the sums lent in the case of mortgages. The bearing of the amount of transfers on the question of the character of the existing assessment and the ability of the land-owners to pay a higher demand in future will be dealt with later on; at present we are concerned with the evidence which statistics of sales and mortgages may be made to furnish as to the rise or fall of the value of land, and the inferences to be drawn from changes in the prices that can be obtained for it. Looked at merely from the point of view of an assessing officer, the “yearly statement of transfers” included in the revenue register of each estate and circle is defective. He cannot certainly infer that all the transactions entered in it against any particular year as having been the subject of mutation orders actually occurred in that year. He may not find the classification of transferees as “old” and “new agriculturists,”* which was adopted in the statement until the passing of the Punjab Land Alienation Act, XIII of 1900, of much practical use. Nor is the present classification of vendors as persons who are, and persons who are not, members of agricultural tribes quite satisfactory for the special purpose with which we are now concerned, for there are many land-owners whose hereditary occupation is undoubtedly agriculture, but who do not belong to any of the tribes gazetted under the Punjab Land Alienation Act. It is therefore well to draw up the village lists of sales during the period of the expiring settlement and existing mortgages referred to in paragraph 307.† In these lists the actual date of each transfer is shown, and the transferees are classed as—

- (a) agriculturists of the village,
- (b) agriculturists of other villages, and
- (c) money-lenders.

From them can be compiled statements of sales and mortgages showing the area transferred in each period of five or ten years, the average price or mortgage money per acre, the multiple of the land revenue which the price or mortgage money represents, and the proportion of the alienations made to each class of transferees. The increase or decrease of the mortgaged area in an estate in each period of four years can also be gathered from the sixth statement in the village revenue register. Collateral mortgages are not entered in the mutation registers or the statements compiled from them because they involve no change in the possession of land. But in the Punjab the great bulk of the mortgages effected transfer the usufruct to the creditor. Some Settlement Officers have also compiled statements of sales and mortgages from the records of the registration offices. If any considerable area has been acquired by Government for railways or canals, the proceedings connected with the assessment of compensation should be examined. When

*“Under the term ‘new agriculturists’ will be included all persons who neither in their own names, nor in the names of their agnate ancestors, were recorded as owners of land, or as hereditary tenants in any estate, at the first regular settlement”—see instructions appended to the statement showing “yearly totals of transfers of rights of owners and hereditary tenants.” on pages 128-129 of the first edition of the Land Revenue Rules.

†For forms see Appendix IX.

Act I of 1894 is put in force, the compensation to be allowed is the market value increased by 15 per cent. on account of compulsory expropriation.

380. Rise in value of land.—The price at which land sells and the sum which can be raised when it is pledged as security for repayments are good indications of the lightness or severity of the existing assessment. In using statistics of sales, however, it must be borne in mind that the price is constantly exaggerated in deeds in order to defeat the claims of pre-emptors. This fact hardly affects the use of the figures in comparing different estates, or soils, or tracts, but it may perhaps make the rise in value as compared with the past seem somewhat greater than it really is. The price too which is entered may represent simply the principal and accumulated interest of a long-standing debt and be much above the real market value of the land. Still, where the statistics show a steady increase in price during the period of the expiring settlement, and where land is worth forty, fifty, or even a hundred years' purchase of the revenue, it may with perfect fairness be argued that the latter cannot be heavy and that the profits of agriculture have risen.

381. Causes which kept the value of land low in early days of English rule.—There can be no question that, for thrifty and hardworking communities which have not multiplied beyond the number that can be economically employed on the land, profits have risen immensely with the opening up of the country to trade and the general improvement of the province which fifty years of orderly government have produced. But it would be a mistake to assume that the striking rise in the value of land is all due to the growth of farming profits. During the first 15 or 20 years after annexation the demand for land was small. Confidence in the stability of a new Government is a plant of slow growth, and no man cares to buy what he will not certainly be allowed to keep. There were parts of the country in which a proprietary title was hardly understood and not greatly valued by the people who could lay claim to it, and land-owners were sometimes eager to bestow, and tenants coy, in accepting occupancy rights.* The change from fluctuating collections in kind to a fixed cash demand was unpopular, and the dislike of the new system seemed to people to be justified when the sudden fall of prices which followed annexation made the payment of the land revenue in money difficult. The Punjab was not subject to the civil law embodied in the Bengal regulations, and land transfer was restrained by administrative orders and by entries made at settlement in the village administration papers. In 1852 the Board of Administration directed that, if a land-owner wished to sell his share, he must first offer it to the whole community or to some individual coparcener at a reasonable price to be fixed by agreement, failing which the revenue officer and three assessors were to determine what the fair value was.† Four years later the same rule was extended to usufructuary mortgages.‡ Long after the orders of 1852 ceased to have any real value a curious relic of them survived in Chapter E.—1—9 of the Rules under the Land Revenue Act of 1871.

*See paragraphs 114-115 and 200.

†Board of Administration's Circular No. 28 of 1852.

‡Financial Commissioner's Circular No. 41 of 1856.

381-A. How to gauge the growth or decline in the value of land.—The best way to gauge the growth or decline in the value of land is to ascertain the multiple of the land revenue which on the average it fetched at different periods during the term of a settlement. Strictly speaking, the amount of the cesses should also be brought into the calculation, which usually amount to less than one-eighth of the land revenue. A mere comparison of the prices per acre may be vitiated by the fact that the figures for one period include a larger proportion of uncultivated land, of irrigated land, or of land possessing great natural advantages than those of the other. It is well to make the comparison both for sale prices and mortgage values, especially if sales have not been very numerous. The materials for the comparison will be found in the 5th of the statements included in the village assessment circle and *tahsil* registers of agricultural statistics. Sales of land in the immediate neighbourhood of great cities like Amritsar and Lahore should be excluded.

381-B. Comparison between the value of land and the pitch of the assessment.—The standard of assessment has now been lowered to one-fourth of the net assets. The following, which was based on the half net assets standard, still applies, *mutatis mutandis*, to the proportion of sale prices to net assets both expressed in terms of land revenue :—

“The average price of land sold in the Punjab in 1909-10 exceeded 100 times the land revenue. When investing money in agricultural land, people usually expect to make a profit of at least 4 per cent. If an investor is prepared to pay 100 times the land revenue, it follows that he considers that the demand does not absorb more than one-fifth of the rental. In other words, he thinks that the revenue does not exceed 40 per cent. of the standard half net assets assessment. If he thought that land paying one rupee as revenue to Government would only yield a rent of two rupees, he would not be prepared to buy at more than 25 times the assessment. The following table may be of use* :—

Sale price multiple of land revenue.	Percentage of half net assets absorbed by land revenue.	Column 2 corrected to allow for cesses at $13\frac{1}{2}$ per cent. on land revenue.
100	40	38
75	50	55
50	67	72
25	100	106

If a Settlement Officer finds that in one assessment circle land has in recent years fetched on the average 50, and in another 90, times the land revenue, he may fairly conclude that there is room for a larger enhancement in the latter than in the former.

*The algebraic formula for contracting the table and similar ones is $R = \frac{200 \cdot H}{N \cdot 2 + 100}$,

R being the land revenue, H the half net assets, 2 the rate of interest and N the multiple which the price is of the land revenue.

A very rough check on the half net assets estimate may be made by comparing the percentage which the existing land revenue bears to it with the similar data derived from sale prices."

382. Capacity of expansion.—An assessing officer must not overlook the capacity for expansion which each estate and assessment circle possesses. He must notice the amount of culturable waste (*banjar kadim*) still left and weigh the chances of its being brought under the plough. He must consider the improvements which might be effected and the likelihood of their being undertaken at an early date. But the possibility of rapid development will not justify him in imposing a demand on any circle in excess of one-fourth of the existing net assets, though it may embolden him to approach the theoretical standard more closely and to take a larger immediate enhancement than he might otherwise have thought prudent.

383. Extraneous sources of income.—The possession by the land-owners of sources of income, such as trade and service, unconnected with the land, stands on much the same footing. The demand has often to be pitched low in view of the necessities of straggling peasant farmers. As we assess villages as a whole, and not separate holdings, it may often be impossible to avoid giving the benefit of this concession to rich and poor alike where both classes hold land in a single estate. But a rich merchant who has acquired the ownership of a whole village has no claim to it: and, where the original land-owners have fallen into poverty and parted with the bulk of their possessions to people of substance, the fact that they still retain some fragment of their ancestral holdings should not be allowed to influence greatly the pitch of the assessment.* In the same way an estate which is enriched by the flow into it of pay and pensions earned in the service of Government need not be treated as leniently as an overcrowded village where the land-owners depend solely on the tillage of the soil. In this case, however, other considerations may come into play for it is wise to treat with liberality men who put their swords at our service.

384. Political considerations.—In many parts of a province near the north-west frontier of India, which is also the chief recruiting-ground of the Indian army, much weight must obviously be given to political considerations in fixing the land-revenue demand.

385. Instruments of production.—Turning next to the instruments of production, these can be classed as men, cattle and tools, using the last term in a loose sense so as to include not only agricultural implements, but also such appliances as carts, sugar mills and even wells. The sufficiency of these for the work they have to do and any changes which have occurred in the cost of labour, cattle and tools call for investigation. A continuous record of wells in use is contained in the first, and of population, cattle and ploughs, &c., in the ninth, of the village circle and *tahsil* revenue registers. A statement of rights in wells forms one of the documents included in the standing settlement record (see Chapter XIV). Additional columns may be added to the form given in Appendix VII to show the number of yokes of oxen or buffaloes employed in working the well, the area commanded by it and the average area of crops watered.

*See also paragraphs 407-408.

386. Ploughs.—Statistics of ploughs and plough oxen do not possess as much importance as they once did, and the working out of plough *jamās* is no longer necessary. The question whether the cultivated area in any village can actually be regularly tilled is best answered now a days by an appeal to the crop returns. But the relation of the number of ploughs to the cultivated area should not be overlooked ; and, where a marked deficiency is discovered, it is well to ascertain whether the cultivation is scamped, or whether its maintenance depends on non-resident tenants. In either case account has to be taken of a source of weakness.

387. Wells.—The depth from which well water has to be drawn, the character of the water-bearing stratum, the sweetness or brackishness of the water, the cost of constructing wells and providing and renewing well gear, the extent to which irrigation is assisted by rainfall or river floods, the sufficiency of the supply of well bullocks, the periods during which wells can be or are worked without intermission, their irrigating capacity as shown by the average area of crops which they water are all matters for enquiry. The water-level sometimes changes with curious rapidity, and, after 35 feet have been passed, every fall of a few feet involves either a large diminution in the irrigating capacity of the wells, or a marked increase in the cost of working them. It is a good plan to have two maps and to colour the villages in the one according to the average depth of the water-level in the wells, and in the other according to their average irrigating capacity, as shown by comparing the number of wells with the acreage of *chahi* crops. If in any estate the latter is very low as compared with other estates having the same water-level, the reason will have to be sought in the fact that the wells are in bad order, or insufficiently yoked, or perhaps in the character of the land-owners. Our information about the number of years that wells in different parts of the country are likely to remain fit for use is very slight. Settlement Officers should in their assessment reports not only state the total number of wells in use at the former and present settlements, but also—

- (a) the number of wells in use at the beginning of the expiring settlement which have fallen out of use, and
- (b) the number of wells sunk during the term of the expiring settlement and still in use.

388. Plough and well cattle.—The quality and cost of the cattle employed for ploughing or on the wells, their liability to disease and the period during which they continue fit for work are very important matters. Where the rainfall is at all scanty, the labour of men and cattle involved in well cultivation is incessant, and the necessity of replacing bullocks at short intervals is a great burden on the land-owners. The cost of oxen has undoubtedly risen greatly, but so has the price of farm produce. In considering whether the farmer is worse off in this respect than he was formerly, the question is whether the price of the cattle he has to buy has risen in a greater degree than that of the crops which he has to sell, or, in other words, has a most important item in the cost of production grown more rapidly than the money value of the produce ?

389. Human instruments of production.—The human instruments of production, owners, tenants and labourers, next demand attention. The

field of enquiry here is wide, embracing as it does everything that affects the economic value of the labour of these three classes as applied to the land. The chief matters for consideration are noticed in the following paragraphs.

390. Labourers and village menials.—The extent to which hired labour is employed, its cost and any forms of agricultural partnership which exist should be noticed. The strength or weakness of the tie which binds together the land-owners and the village artisans and menials, and the degree in which the former depend on the latter for assistance in cultivating the soil, should not be overlooked. It has been suggested that the gradual substitution of contract for status, and competition for custom, in the relations of these two classes has involved a large increase in the cost of production to landlords.*.

391. Tenants.—There are parts of the province where the tenants are masters of the situation, where they throw up cultivation with a light heart and one village being sure of a welcome elsewhere; there are other parts where they will accept very hard terms rather than give up their holdings. These differences may be very imperfectly reflected in the rent statistics, but they cannot be neglected in actual assessment.

392. Indian rural society not homogeneous.—One of the most striking features of Indian rural society is its extreme want of uniformity. Differences of race and inherited disposition as wide as those which sever the Celt from the Saxon are found in neighbouring villages, or even in two subdivisions of a single estate. These are complicated by the influences brought to bear on character by rival forms of religion, the lines of division in which often cross those which separate tribe from tribe. As a husbandman tilling his own fields, or as a landlord dealing with tenants and dependents, an average Jat is very unlike an average Rajput, and differences less in degree, but still important, often exist between Hindu Jats and Muhammadan Jats, or Hindu Rajputs and Muhammadan Rajputs. These two tribes are referred to because of their numerical importance, and not because they always and everywhere represent the extremes of agricultural efficiency and inefficiency.

393. Tribal composition of village population.—The tribal composition of the rural population as a whole can be gathered from the ninth, and that of the part of it which consists of land-owners from the sixth, of the village assessment circle and *tahsil* revenue registers. If these matters are not set out in sufficient detail for an assessing officer's purposes, it is easy during settlement to have all needful particulars entered for one year in the case of each estate.† In an assessment report the extent of the possessions of each of the principal tribes and the amount of revenue which it pays can be conveniently shown in percentages of the whole cultivated area and of the total assessment.

394. Ancestral habits and character.—A settlement of the land revenue which claimed for the State the full one-fourth net assets share everywhere would involve differential rates for the assessment of villages belonging to good and bad agricultural tribes. But, apart from this, prudence forbids

*Mr. Ibbotson's Assessment Report of *tahsil* Panipat, paragraph 46.

†The tribal details for each village as a whole can be compiled from the tribal registers drawn up at the last census.

any attempt at an absolute equality of treatment. Habits and customs unfavourable to good husbandry which have grown up in the course of generations will not be changed in a day. It is wise to fix a demand in every case high enough to discourage slovenly farming and train the people gradually to habits of steady industry. Undue leniency, by fostering sloth and extravagance, may ruin a community as surely as overassessment. It increases to a harmful degree the sums which can be borrowed on the security of the land, and large credit is baneful in the case of thriftless people engaged in the very precarious trade of farming. But, on the other hand, an assessment which hardworking Arains can pay without difficulty may drive Rajputs to crime or force them to sell or mortgage their lands. Existing inequalities should be reduced where practicable, but their sudden removal is impossible. There may be here and there incorrigible communities, or even tribes, which sooner or later must lose their ownership of the soil. But even in their case it is better for the State that extinction of ancient rights should be a gradual process manifestly the outcome not of a harsh revenue administration, but of the ill-deserts of the right-holders.

395. Incidence of rural population on cultivated area.—There have been seven general enumerations of the people of the Punjab in 1854, 1868, 1881, 1891, 1901, 1911 and 1921. In calculating the incidence of the population on the cultivated area, it is well to exclude the people living in towns. Any cultivated lands belonging to the towns can also be deducted if they are usually tilled by resident cultivators. It is worth while to notice the incidence on the average area of crops as well as on the cultivated area. Until the rural population has reached the number that can be profitably employed on the cultivation of the soil and on the trades subsidiary to agriculture, such as those of the village blacksmith or grain dealer, its steady growth is a healthy sign. But when that limit has been attained, and all the land worth cultivating has been brought under the plough, any further increase is an evil unless improved means or methods of production can be introduced. A Settlement Officer may get a rough notion of the population that can be economically occupied in farming in any particular tract by imagining an agricultural partnership formed, by, say, four families consisting of twenty persons, young and old, and considering what amount of land would fully employ the energies of the working members of the association and support them and the other members dependent upon them. The partnership should be representative of the chief classes living off the land, and should consist in the average proportions of persons too young or too old to work, women and children taking only a minor share in farm labour, and adult males. The last, who may be described as the working partners, will fall into three classes, some contributing only the labour of their hands, others bringing oxen as well into the common stock and others supplying land and cattle in addition to their own labour. The share of these three classes in the produce will of course be very different.* Suppose the calculation shows that the members of an association of twenty persons can till 18 acres of land distributed into irrigated and unirrigated in the proportions usual in the tract, and that the crops they raise are sufficient to support all the members of the partnership and to pay the land revenue and cesses, it may be concluded

*An interesting account of actual partnerships of this sort will be found in paragraphs 276—281 of Mr. Ibbetson's Settlement Report of Karnal.

that a population of 576 to the square mile of cultivation would not be excessive. Some addition would have to be made to this figure on account of persons engaged in trades which supply the everyday wants of the agricultural population.

396. Size of holdings.—Further light is thrown on the pressure of the population on the soil by the figures in the sixth of the statements contained in the village and assessment circle revenue registers, which show the number of holdings and owners, the total area and the cultivated area. It is, however more important to know the normal amount of land owned by each household than the size of a normal holding or the number of acres usually possessed by individual owners.* It is therefore worth while to enquire at village inspections how far these three things agree. Some joint holdings will be found the shareholders in which are heads of different families, and a certain number of the proprietors will be children. But on the other hand an old man with married sons continues till his death to be recorded as owner of the joint family property. It will probably be found that there is no great difference between the number of holdings and the number of owners.* As time goes on the tendency to divide joint holdings grows, and it is strongest in the case of the most industrious tribes. This is a point to be remembered in comparing the average size of holdings at two settlements if the first was made before the present plan of recording the number of owners as well as the number of holdings was introduced.

397. Statistics must be examined village by village.—No safe conclusions can be reached by deducing general averages from the figures referred to above. If a Settlement Officer wishes to obtain a clear understanding of the existence or extent of overpopulation, he must be willing to study the question village by village during his inspections. It will soon become apparent that in order to get true ideas on the subject some holdings must be altogether excluded and other adjustments must be made. Thus the general average for an estate may be greatly affected by the presence of a few very big holdings. Or the holdings may be large, but the land included in them may be mostly in the hands of occupancy tenants paying low cash rents which leave only a trifling margin of profit to the landlords after the revenue and cesses have been paid. On the other hand proprietors with small holdings may own land elsewhere, or have occupancy rights in other fields, or they may eke out their resources by cultivating as tenants-at-will. When he has examined the subject village by village, a Settlement Officer can say with some confidence what figures must be eliminated from the circle totals before they can be accepted as evidence that normal holdings have or have not sunk below the level compatible with the prosperity of the great body of peasant owners.

398. Exclusion of certain classes of holdings.—All holdings consisting of an entire estate may be struck out without hesitation. How far it is wise to go in excluding other very large holdings must depend on local circumstances. Holdings which have been bought or are held in usufructuary mortgage by money-lenders may properly be cut out, and also small plots which the land-owners have given to religious persons and village servants. Wells and threshing floors which are the joint property of

*Mr. Francis' Assessment Report of *tahsil* Moga, paragraph 31.

several shareholders, whose cultivated lands are held in separate ownership, should not be treated as independent holdings for the present purpose, though they appear as such in the *jamabandi*. The area of the village common land must be included. After all these adjustments have been made the area of the remaining holdings may be reduced by the amount of land held by occupancy tenants paying low cash rents.

399. Tenants' holdings.—When calculating the size of the holdings of occupancy tenants and tenants-at-will, it is a good plan to show separately the holdings of tenants under each class who are also land-owners. In this way it is possible to get a better idea of the conditions under which ordinary tenants live and of the extent to which land-owners, whose holdings are too small to provide a comfortable livelihood for their families, can find additional means of support.

400. Effect of over population on assessment.—The fact that the people of any tract by multiplying too fast have condemned themselves to a low standard of living and the constant pressure of debt is no reason for reducing an assessment. Any relief given in this way would be small, and would probably soon be swallowed up by a further increase of numbers. Nor, where the existing assessment has become much below the one-fourth assets standard, can overpopulation fairly be put forward as an argument against a moderate increase, which will not make individual land-owners much worse off than they were before and may check to some extent the tendencies from which the evil has sprung. But a practical man will see that he cannot treat a congested tract exactly like one more happily situated, and that he will have to forego in the one part of the increase which he would take without misgiving in the other. He will also remember that the same cause which depresses the condition of the land-owners has a tendency to force up rents and make the one-fourth assets standard very severe.

401. Decline of population.—The decline of the rural population in any part of the country and its failure to maintain cultivation at its old level are commonly traceable to causes which a Settlement Officer cannot remove or control. All he can do is to adjust the amount of the assessment and adapt its form to existing circumstances, to point out the causes of decay and suggest any remedial measures which seem feasible. A bad climate is generally the root of the mischief in these cases, and the effect of climate on the health and energy of the people is a point which no assessing officer can afford to neglect.

402. Extensive transfers a sign of embarrassment.—The sources from which information as to the extent of sales and mortgages can be drawn have been described, but the bearing of alienations on assessment has still to be considered. Broadly speaking, a large amount of land transfer, especially when the purchasers and mortgagees are money-lenders, is a sign of embarrassment among the land-owning classes, and the rapid growth of alienations in any tract is an unhealthy symptom.

403. Subject to be examined village by village.—But it behoves a Settlement Officer to be on his guard against exaggeration. His daily work makes him appreciate keenly the difficulties with which small farmers have to contend, his ears are besieged with interested statements on the subject, and it is not wonderful if sympathy should sometimes weigh down the

scale unduly in the direction of pessimism. Sound conclusions as to the real extent and causes of embarrassment can only be reached by studying the figures not only in the mass, but in detail, village by village. With the list of sales and existing mortgages before him, an officer inspecting an estate should find it comparatively easy to trace the causes from which the transfers have sprung. Indeed an intelligent Indian subordinate can do much of this work for him.

404. A considerable amount of transfer not a sign of general embarrassment.—A small proportion of the sales may be found to be fictitious. For example, a gift to a favoured relation may be clothed in this garb to defeat the claims of the legal heirs. A considerable amount of mortgage will always exist where land is held on a moderate assessment by bodies of peasant proprietors with free right of transfer.* A community may be in a healthy state as a whole, though it includes a number of foolish people to whom credit is a snare, and unfortunate people who have fallen into debt. Farming is a very risky trade, and the most prudent peasant owner may have sudden emergencies to meet and be unable to borrow without making a temporary alienation. Some mortgages have no connection with poverty. Men who take service away from their homes often mortgage their holdings rather than leave them in the hands of unscrupulous relations or tenants, and occasionally transfers are made merely to raise money for investment in land elsewhere. But it would be idle to deny that the bulk of the mortgages effected spring from the pressure of debt, and that in the case of very many of them redemption is hopeless. A large number of sales to strangers is usually a worse symptom than frequent mortgages. But it has been noticed that Rajput communities and other proud tribes will cling to the name of owner long after the substance has departed and the land is pledged for a sum that can never be repaid. It may be found when the figures are analysed that the general effect is heightened by an excessive amount of transfer in particular estates or localities or in the villages belonging to a particular tribe.

405. Collateral mortgages and unsecured debt.—It is not always safe to assume that the absence of sales and usufructuary mortgages means freedom from debt. Where the soil is rich and the harvests secure, such an inference may be safely drawn. But there are tracts where the money-lender is slow to undertake the risks involved in a usufructuary mortgage by which he would become responsible for the payment of the land revenue. He looks to the debtor's cattle or crops for repayment, and poverty-stricken land-owners are found whose fields are subject to no legal burden, but who hand over regularly the bulk of their crops to the village banker, and live on what he will advance to them until the next harvest. Statistics of sales and usufructuary mortgages should therefore be supplemented by the

*The situation has been much changed by the passing of the Punjab Land Alienation Act, XIII of 1900. It is now not uncommon to find that the area redeemed in a given tract since the introduction of the Act has exceeded the fresh area mortgaged, though, owing to the increased value of land, the total mortgage debt may at the same time have increased. It is due to the same cause that the mortgagor is now often in a position to force redemption of a portion of the mortgaged land without payment of any portion of the mortgage debt, the latter remaining as fully secured as it was originally owing to the enhanced value of the remainder of the lands. The Act has greatly strengthened the economic position of the land-owner, a process which will doubtless be further assisted by the wide development of the co-operative credit societies.

collection of information as to collateral mortgages and the amount of unsecured debt. In heavily mortgaged tracts the extent of embarrassment is only disclosed when the floating debt from which fresh transfers must arise has been taken into account.

406. Effect of general indebtedness on assessment.—When a Settlement Officer has got a clear idea of the extent and causes of indebtedness, he has to ask himself whether it indicates any general lack of prosperity, or is merely the outcome of individual folly or misfortune. If the community as a whole is in a depressed condition, he must consider whether there is anything in the pitch or form of the existing assessment or in the system under which it has been collected which has produced or aggravated the evil. If he is convinced that the assessment is in fault, he must lower its amount or change its form. But where he finds that money is freely lent on the security of the land, he will be slow to assume that an estate is overassessed. If the method of collection has been bad, it is his duty to point out the errors that have occurred, so that they may be avoided in future. Where debt is in no wise due to overassessment, it may still have to be considered as an obstacle in the way of taking the full enhancement that might otherwise be claimed. The policy dictated by prudence and humanity in such a case is substantially the same as that explained in discussing the bearing on assessment of two evils from which debt often springs, hereditary want of thrift and overpopulation.

407. Differential assessment of alienated lands.—In the foregoing paragraphs cases have been considered in which the character or the poverty of the proprietors impels a Settlement Officer to fix the demand below the amount due under the one-fourth net assets rate. It is a drawback of our village system of assessment that it makes it difficult to discriminate between the struggling peasant owner and the well-to-do landlord when they are found, as often happens, in the same estate. The free right of transfer, which proprietors for many years enjoyed, has greatly affected the constitution of many village communities by introducing into them as owners and mortgagees persons who are aliens to the original brotherhood, and often non-resident money-lenders. It is sometimes hard to decide whether the demand should be fixed mainly with reference to the circumstances of the majority of the proprietors who represent the old land-owning stock, but have lost their hold on a considerable part of the land, or with reference to those of a few well-to-do transferees. These difficulties and the loss to the revenue which the present system entails have led to suggestions from time to time for an assessment frankly differential in its character. One form of differential assessment suggested was to fix for each estate an assessment as near to half net assets as possible, and to distribute this assessment over the holdings, granting freely to members of the original proprietary body and to true agriculturists special remission of part of the full revenue demand. The form of the assessment would thus become very similar to that in force in some villages on the North-West Frontier where deductions are allowed to the land-owners as "border remissions." It is urged that, when it is deemed prudent to pitch the demand below the standard out of regard for the difficulties of the old proprietary body, there is no reason why further loss should be incurred by granting the same indulgence to transferrees. An object which bulked largely in the eyes of most advocates of

differential assessments was the check on alienations to money-lenders which it has been supposed they would exercise. Accordingly the scheme usually put forward confined the imposition of the full assessment to lands alienated by sale or usufructuary mortgage to persons of this class. Some would limit the proposal to future transfers, others would apply it at a revision of the assessment in the case of all transfers which had taken place during the currency of the expiring settlement. The subject was a good deal discussed in the Punjab thirty-five years ago, and the arguments on both sides will be found in the papers noted below.* The decision of the Lieutenant-Governor of the day, Sir Dennis Fitzpatrick, was unfavourable to any plan of the sort. He held that the proposal was in no way unjust or unfair if it was limited to future transfers, but he thought it unwise to impose an enhanced assessment in the case of transferees who were themselves agriculturists, as they would probably be for the most part small farmers seeking, perhaps with borrowed money, to make some small addition to their own petty holdings. If the scheme was adopted at all, it should be confined to future transfers to money-lenders, but, even so, the policy proposed was a very doubtful one. It might be confidently asserted that it would not check alienations to any degree worth mentioning, while it would certainly lessen the amount which an embarrassed peasant could get for his land. The medicine in short would not mitigate the disease, while it might produce unforeseen, and very possibly harmful, consequences. At the same time the scheme, when limited to future transfers to non-agriculturists, would yield little additional revenue to the State. A few years later statutory restrictions on alienations to money-lenders were imposed, and one of the arguments in favour of the plan of differential assessments fell to the ground.

408. How far discrimination in assessment is just and expedient.—But whatever may be thought of the merits of the particular proposals which Sir Dennis Fitzpatrick rejected, few will contend that well-to-do rent-receiving land-owners, whether they be money-lenders or not, are entitled to the concessions which policy and humanity often demand in the case of struggling peasant farmers. How far discrimination can wisely be carried may well be a subject of dispute, but equality of assessment is under existing circumstances impracticable. Where the holdings of the two classes are found in a single estate, it may be necessary to treat them exactly alike, but that is a matter of expediency, and not of justice.

*Revenue Proceedings of the Punjab Government, Nos. 1 and 2 of August 1894 and Nos. 22—44 of December 1895.

CHAPTER XXIV.—Assessment Guides other than the One-fourth Net Assets Estimate.

409. Assessment guides other than the one-fourth net assets estimate.—There is only one standard of assessment, that of one-fourth net assets, and the question of the determination of its money equivalent has already been discussed. But the practical consideration of the problem of land-revenue settlement has suggested several assessment guides which may be employed to supplement and correct the conclusions drawn from a bare examination of rents and other net assets data. Even if the difficulties in the way of an exact calculation of the standard assessment could be completely overcome, it is admittedly a maximum which cannot be reached in all cases under all circumstances and at one and the same time. One use of the assessment guides now to be considered is to aid a Settlement Officer in deciding how nearly he can attain to it without too largely or too suddenly increasing the burdens on the land.

410. One-sixth produce estimate.—In most districts of the Punjab an assessing officer has to deal mainly with land cultivated by the owners themselves. Here the existing value of the land on which the net assets is based cannot be arrived at by any direct process. To meet this condition of things the system in force in the Punjab is, as described in paragraph 809, to apply the two main standards derived from cash and kind rents prevailing in areas where they are levied to the lands held by self-cultivating proprietors. A third method, and one which was much used for several years in the Punjab,* is to ascertain the gross produce of all the lands in the tract under assessment and to take a fixed proportion of this produce to represent the Government demand. This proportion was fixed in 1871 at one-sixth of the gross produce. The proportion was arrived at more by experience than by any theoretical process, and is admittedly only an approximation not necessarily having any connection with the renting value of land, or with the surplus profits of the proprietors. Moreover, in this process there is the same difficulty of appraising the money value of the proportion of the gross produce as in a calculation of the net assets based on rents in kind. No one-sixth produce estimate is now necessary. But a Settlement Officer should carefully note not only what proportion of the net assets, but also what share of the value of the total produce, his proposed assessment will absorb. By fixing attention solely on the former, which may be based on the rents paid on a small fraction of the cultivated area, a good deal of real inequality in the assessment of different tracts may arise.

411. Rates of past settlement applied to existing areas and result enhanced on account of rise in prices.—If, after studying the fiscal history of the tract under assessment, the Settlement Officer is satisfied that the demand under revision was not burdensome when first imposed, he can frame a rough assessment guide by applying the rates of the existing settlement to the present areas and increasing the result proportionately

*See paragraph 70.

to the general rise in the value of agricultural produce. The rates to be used in this calculation may either be the rates employed by his predecessor in assessing different soils or classes of land, or the average rates adopted by the land-owners in distributing the revenue over their holdings. In calculating what these were only such villages can be taken into account as adopted in the *bachh* differential soil rates. The latter are valuable if there is reason to believe that the *bachh* was made with the intelligent co-operation of the proprietors, and does not merely represent the method of distribution which the settlement officials thought the best or the least troublesome to themselves. The average rates used in assessment ought of course for a circle as a whole to agree closely with the sanctioned revenue rates, but in some of the older settlements there is a considerable difference between them.

412. Cautions as to use of this guide.—There are two cautions to be given as to the use of this guide. We conclude that an assessment was not too high if it worked without strain in the early years of its currency. But if these were years of specially favourable harvests and good prices, or if the settlement was at once followed by the rapid breaking up of waste land, its easy working may not be solely due to its own merits. Again it is only right to take credit for the full increase of the cultivated area if the new lands with an equal expenditure of labour produce as much as the old, and for the whole of the rise in prices if the cost of production has not grown quicker than the value of the produce (see paragraphs 369 and 388). When discreetly used, however, this guide is not without value.

413. Assessment of similar lands in neighbouring tracts.—But besides looking back to the rates used by his predecessor twenty or thirty years ago and trying to adapt them to present circumstances, a Settlement Officer will naturally look around him and see what rates have in more recent times been employed for the assessment of similar lands in neighbouring *tahsils* or districts. The nearer the settlement with which comparison is made in point of time, the smaller will be the adjustments needed on the score of changes of prices and the like. It will not be difficult to learn how the settlement of an adjoining *tahsil* or district is working, and with the help of the revenue registers and assessment reports it is now easy to tabulate the leading statistics of any two circles and to mark the chief points of resemblance and difference. A scheme giving the heads of a pretty thorough comparison of the kind required will be found in Appendix XIII. The form may be amplified in accordance with local requirements. It may sometimes be possible to supplement the study of the statistics by a brief visit to the tract to which they relate. In comparing the *chahi* rates of two circles the average area per well to which the rate in either case was applied should be noted, and it is well to take the larger of these areas and see what the same acreage surrounding a well in the other circle pays at the wet and dry rates sanctioned for that circle. Thus, if the average *chahi* area per well is in circle A 24 acres and in circle B 18 acres, and the *chahi* rates are Rs. 8 and Rs. 3-8-0, respectively, while in circle B the dry rate is Re. 1-8-0, 24 acres surrounding a well in either circle pay Rs. 72.

414. Cautions as to use of this guide.—When comparing the statistics of two tracts, the Settlement Officer must make sure that the chief factors, class of land, rainfall, depth of water level, &c., are really similar, and that technical terms, such as *chahi* "cultivated area," have in both cases

been used in exactly the same sense. It is well to remember that, while equity calls for a rough equality of treatment between similar tracts, inequalities of long standing, whether they spring from historical causes or from a mere difference between the views of two Settlement Officers twenty or thirty years ago, can only be redressed by degrees.

415. Comparison with revenue in Indian States.—The incidence of the revenue in any adjoining Indian State, the manner of its collection and the condition of the land-holders should not be neglected. The wide difference between our system of assessment and that commonly followed in the territories subject to ruling chiefs makes it impossible to use their revenue arrangements as a guide to be followed at all closely. What most Indian rulers take from their subjects is still rent rather than revenue, and the cultivators may be free from debt because none will take their land as a pledge. Our scheme of settlement on the other hand has been framed with the express object of making land a valuable property. But where an existing assessment is much below the standard of one-fourth net assets, and it is found that villages beyond the border paying a far higher demand are quite as thriving as British villages, it is difficult to urge that a substantial enhancement will produce distress in the latter.

416—419.—Omitted.

420. Opinions of Indian officials and respectable land-owners.—A Settlement Officer should freely discuss the assessment in all its bearings with his most experienced Indian subordinates. Some tact may be required in order to elicit their real opinions. It is a good plan to make the Extra Assistant Settlement Officer and *tahsildar* record the assessment which they think each village can suitably bear, and to compare their estimates with one's own. Some importance was at one time attached to what were known as the "*chaudhris' jamas*," that is, to the village assessments proposed by committees of respectable land-owners. To set men of this class to frame assessments for their own villages and those of their neighbours is to put a strain on their honesty and intelligence to which the former will possibly, and the latter certainly, prove unequal. But where they know the total increase which a Settlement Officer intends to take in a circle, their view of the proper way of distributing it over the estates may be worthy of attention. It is hardly needful to point out the importance of the freest intercourse between the Settlement Officer and all classes, including assignees, interested in the land revenue. It is right that *jagirdars* should feel that they have had a fair hearing in a matter which affects them so closely. It is a good plan for the inspecting officer to enter up a rough estimate of the future revenue of the estate immediately on his inspection.

CHAPTER XXV.—Inspection of Estates for Assessment.

421. Inspection of estates for assessment.—Settlement Officers are required to make a special inspection of every estate before fixing its assessment. It is necessary that this task should be practically completed in each *tahsil* before its assessment report is submitted. Every officer will follow his own plan of inspection, but the following instructions issued by the late Colonel Wace contain some useful hints on the subject :—

“ At the beginning of his operations, the Settlement Officer should provide himself with notebooks of a convenient size, and assign a leaf to each estate, arranging the villages by assessment circles topographically. So far as is possible, he should study the available statistics of each estate before inspecting it, and should note in the leaf for the estate the points in the statistics which seem to distinguish the estate and call for test or explanation on the spot.

“ It will also prove of much assistance if, in the inspection notebooks, or opposite the leaf assigned to each estate, a small-scale map of the village is inserted. Such maps can be copied from the revenue survey volumes, which are usually on the convenient scale of from 2 to 4 inches per mile ; or a trace of the index map referred to in paragraph 20 of Appendix VII can be used. A few rough notes written across the map will impress the character of the lands of the estate more clearly on the inspecting officer's memory than even the fullest written description, and, as he will often have from 1,000 to 2,000 estates to inspect, any real assistance to the memory becomes of the greatest value to him. Should this elaboration, however, not be practicable, it is at least advisable to keep a small-scale map of the assessment circle, showing boundaries of estates, in the pocket of the notebook.

422. Character of notes to be recorded.—“ It is not desirable to record too voluminous notes ; but when an officer has 500 or more estates to deal with, his memory needs at least this much aid, that the important facts relating to each village should be carefully noted as they come under observation. An assessing officer should also remember that accident or State necessities may at any moment involve his removal, and that the power of his successor to fill his place without delaying the conclusion of operations will depend very much upon the notes made over to him.

423. Points to be noted on.—“ The following heads are given in illustration of the points which should ordinarily receive attention in these notes, but it will be understood on the one hand that it is often unnecessary to remark on many of these points where estates are small and close together, and on the other that there is no limit to the varying circumstances requiring special attention in different tracts :—

- ✓ “ (1) Nature of crops and prevalence of the more valuable crops and the average area under crop during the year compared with the cultivated area of the village :

- “(2) General lie^v of the land, quality of soil and situation of the village with regard to communications, liability to floods and drainage ;
- “(8) Sources and permanency of irrigation supply and extent of irrigated area :
- “(4) Caste of the proprietary body, and how far the cultivation is in the hands of the proprietors themselves, or of resident or non-resident tenants with or without occupancy right ;
- “(5) Average size of proprietary holdings ;
- “(6) Past fiscal history of the estate showing the general result of previous assessments, with special reference to reductions or suspensions hitherto found necessary ;
- “(7) Extent of indebtedness as shown by a rough estimate of outstanding floating debt as well as by actual areas sold and mortgaged ;
- “(8) Increase in cultivation and extent of culturable land still available for future increase ;
- “(9) Prevailing rents ;
- “(10) Lastly, it should be noted how far the proprietors of a village depend for subsistence on their land alone, and whether the estate yields any miscellaneous profits other than the ordinary crops.

424. Method of inspection.—“Such notes as are above described can be made on the occasion of any visit to an estate ; and whenever an assessing officer rides through a tract, he should carry with him the notebook relating to it. But besides occasional visits arising out of current duties, there should be one inspection of each estate for assessment purposes, which should be as full and complete as possible. The assessing officer's ability both to frame general rates for the circle and to make a fair assessment of each estate depends largely on the manner in which he carries out this duty. At what time this inspection work can be taken up depends partly on the progress of village record work, but the earlier it can be begun the better, for it usually occupies much time and is very laborious. The amount of attention and examination each village requires depends on the character of its husbandry, tenures and recent fiscal history. Sitting in a public place in the village or in his tents adjacent thereto, the assessing officer should have the map of the estate and the *patwari's* registers laid out before him, and should discuss with the chief owners freely and openly the quality of the land, the character of the assessment thereon and the facts and figures shown in these registers. He should also, either before or after the discussion, ride over the estate, taking some of the agriculturists with him.”

425. Omitted.

426. Detailed inspection not to be begun too early.—One or two further remarks will not be out of place. It is a mistake to begin the inspection of villages for assessment too early, especially where the Settlement Officer has had little previous experience of assessment work. During the first year the organization of his staff and the supervision of survey and

record work are his chief duties. While he is moving about his district for that purpose, he has an excellent opportunity of acquiring that general knowledge of the people, the agriculture and the strength or weakness of its different *tahsils* and circles, which is a needful preliminary to a detailed examination of the villages.

427. Statistics to be studied before inspecting an estate.—

The statistics to be studied before an estate is inspected will be mostly found in—

- (a) the village revenue register or notebook, ✓
- (b) the abstract village notebook,
- (c) the list of rents (Appendix IX),
- (d) the well statement (Appendix VIII-D.),
- (e) the lists of sales since settlement and of existing mortgages (Appendix IX).

To these may be added a few tables drawn up beforehand according to a prescribed pattern with the object of bringing together in a striking way the principal assessment data, including not only rents, but also the chief of the factors referred to in the chapter on "General Considerations" (Chapter XXIII). The sheet containing these tables with blank pages for the entry of the settlement *tahsildar's* remarks on the estate is sometimes known as the *misl haisiyat or naqsha dehi*.

428. Remarks of Settlement Officer.—It was formerly the custom for the Settlement Officer to write his assessment and notes in the revenue registers of the villages, but it is more convenient to record them in the abstract village notebooks, and that is now the prescribed procedure.* It is well in writing the notes on the different estates to follow some definite plan and order of subjects, and to omit details of no permanent value and having no direct bearing on the assessment. District officers cannot be expected to pay much attention to diffuse notes consisting of jottings made at different times.

429. Remarks to be written up daily.—The tracing of the survey map or a copy of the field map reduced by pentagraph should be placed in the abstract village notebook rather than in the rough notebook alluded to in Colonel Wace's instructions. Indeed, if a Settlement Officer can write up his remarks daily in the abstract notebook of each village which he has inspected, he will save himself much time and trouble, and the notes actually taken on the spot need only consist of the briefest entries in a pocket-book. A paragraph will of course have to be added after the demand has been finally fixed showing the grounds on which its amount was determined.

430. Use of rough preliminary rates.—The considerations which will be present to a Settlement Officer's mind in making the rough estimates of the future revenue of each estate to which Colonel Wace referred will be many and various. But he will find it expedient from the first to use rates of different kinds as general guides. None of these can be slavishly followed in village assessment, but they are needed if only to serve as a standard of comparison and ensure some measure of equality in assessment. These

*See Standing Order No. 24, paragraph 7 (8).

rates may be rough one-fourth assets rates, rates of the current settlement enhanced for rise of prices, rates recently sanctioned for similar tracts elsewhere and tentative rates which the Settlement Officer thinks likely to prove suitable to the circumstances of the circle, but which he may expect to modify as his enquiries proceed. Though the data for making net assets estimates based on *batai* and cash rents may still be incomplete, it should as a rule be possible to frame rough net assets rates. It will often be found that the net assets rates on any particular class of land or soil, the share of the produce usually taken by landlords being known, depends really on the valuation of two or three crops, for example, wheat and *chari*. Where *zabti* rents are paid for one or more of these crops, the matter becomes still simpler. It may also be easy to ascertain roughly what is considered a fair cash rent for each class of land. It may appear, for example, that certain rates per *kanal* and *bigha* are very generally taken. As far as possible, all the estates in a circle should be visited during a single tour, and when the whole circle has been inspected, the Settlement Officer should scrutinize his preliminary village assessments and modify them where necessary.

431. Great importance of village inspection.—The worth of a settlement depends mainly on the care and judgment exercised at this stage. Fuller knowledge may lead an officer before he is ready to report his proposals for sanction to alter his view of the amount of enhancement that should be taken or the extent of the relief that must be allowed. But it is hardly likely that he will change materially his estimate of the relative revenue-paying capacities of the different estates, and a high assessment which is properly distributed may be expected to work better than a lower one in which the distribution over estates is mechanical or ill-judged.

CHAPTER XXVI.—Assessment of Particular Classes of Land.

432. Some remarks on assessment of different classes of land desirable.—In the preceding chapters an attempt has been made to give a general description of the means for making a just settlement of the land revenue. In the course of the discussion some of the difficulties besetting the rating of lands watered by wells and canals flooded by rivers and dependent solely on the rainfall have naturally been mentioned. But it will not be out of place, even at the risk of some repetition, to deal here in a more particular manner with the main problems connected with the assessment of the principal classes of land.

433. Diversity of conditions under which well irrigation is carried on.—A stranger studying a table showing the wide range of *chahi* rates in the Punjab from between five and six rupees an acre in parts of Jullundur and Hoshiarpur and in some of the districts north of the Salt Range to a rupee or less in the Bar tracts of the western districts might well doubt whether any reason could be given for such extraordinary variations. With growing knowledge he would come to see that they could be broadly justified by the extreme diversity of the conditions under which well irrigation is carried on in different parts of the province. In the plains the rainfall varies roughly from 5 to 50 inches, and wells are used for irrigation with a water-lift ranging from a few feet to 50, 60, or even 70, feet.* In some low-lying moist tracts the wells are an insurance against occasional drought, and in ordinary seasons are worked for the maturing of a small area of specially valuable crops. Another marked type of well cultivation is found at its best in the uplands of Jullundur and Ludhiana. Here the coarser food-grains and the fodder crops are raised on the rain lands, and the well areas are devoted to fine crops of wheat and maize, cotton and sugarcane. In years of average rainfall no attempt is made to spread the water over a wide surface, from 10 to 20 acres being thought enough to irrigate in the two harvests. Elsewhere, as in the great well tract known as the *Charkhri Mahal* in Sialkot and Gujranwala, the climatic conditions lead the people to annex to each well a far larger area in the hope that, with favourable rains at the sowing season a great breadth of crops of moderate value may be raised. Where the rainfall becomes really scanty, the wells have to produce even the food for the cattle that work them. Finally, as in the south-western districts, wells require to be supplemented by river water coming naturally by overflow, or brought through artificial channels, on to the land. At the other end of the scale is the intensive cultivation practised on the wells in some of the districts lying to the north of the Salt Range. There the whole area served by a well is usually from 3 to 5 acres. This kind of cultivation is found at its highest in some of the villages in the Chach plain in Attock. Even within the limits of a single district the conditions under which well irrigation is carried on may vary immensely. In the hill circle of the

*In parts of the Gurgaon district wells are worked even where the water level is 100 feet or more.

Shahpur district a well has, on the average, attached to it only $2\frac{1}{4}$ acres, but produces annually $4\frac{1}{4}$ acres of irrigated crops. In the Ara circle the average area annexed to a well was, at the settlement of 1888, 54 acres, but though as many as six yokes of oxen were employed on a fully-worked well, half the land lay fallow every year.*

434. Care requisite in assessing wells.—Such striking variations make the problem of fairly rating well lands a difficult one, for it is impossible to lay down any general proposition, as Mr. Prinsep was inclined to do, that any particular sum per acre represents the proper difference between wet and dry rates over very wide areas, and the experience gained in one place may, unless checked by a careful study of local conditions, be positively misleading elsewhere. Nor does the difficulty end when the character of the well irrigation in different tracts and different circles has been clearly apprehended. Within each circle, especially where the circles are large, the well assessments must be expected to vary considerably. Changes of water level are sometimes very rapid; sweet and salt wells are found not far apart; in one estate the wells may be mostly old and weak or insufficiently supplied with oxen, in the next they may all be in good order and fully yoked. Even inside a village the wells will be old and new, good and bad, and the system of tillage on those near the homestead and those at a distance from it may be so distinct as to call for separate rates. A Settlement Officer cannot always leave the land-owners to distribute the total well assessment over the wells in an estate; he must be ready to help them in the task, and have sufficient knowledge to detect any attempt on the part of more powerful coparceners to put an unfair share of the burden on their weaker brethren. He cannot hope to make a well assessment which will work smoothly unless he will pay great attention to details. Mr. Francis has told us that in Zira “each well was seen during my inspection of the village and the area shown in the annual papers as watered by it was verified. The depth, &c., and any defects in the well or inferiority in the land were noted. The people were informed what sums I proposed to put on each well.” Such minuteness is often impossible, and perhaps is not always desirable. But the remarks of the settlement *tahsildar* in the well statement and a table showing the average area of crops watered by each well should direct the attention of the Settlement Officer to the wells which specially require to be looked at in his village inspection.

435. Cost and risk of well irrigation.—The concession of an assessment at unirrigated rates for a period of years† is intended to enable an owner out of the extra profit to be derived from irrigation to compensate himself for his capital expenditure with reasonable interest. The best proof that the treatment accorded to wells as regards their assessment is not considered unfair by the people is the steady growth of irrigation in most suitable tracts. Assessing officers who are dealing with parts of the country where well-sinking is specially difficult and costly should not forget that the Commissioner has power to extend the ordinary period of exemption‡. But apart from the question of the initial capital expenditure, there is always

*The Ara circle is now canal-irrigated.

†See Chapter XXIX.

‡See paragraphs 501—506.

a fear that in viewing the rich results of well irrigation we may overlook the cost at which they are obtained and the risks involved. The life of a peasant farmer with a small irrigated holding is often a hard one. It has been noticed that while wells will tide a village over ordinary seasons of scanty rainfall, a tract dependent on them recovers more slowly from prolonged drought than an unirrigated one. Many of the cattle succumb to incessant work, though valuable crops like sugarcane are sacrificed to keep them alive. And an outbreak of murrain may do quickly in an ordinary year what a drought effects more slowly.

436. Caution as to recorded area and rent of *chahi* lands.—The need of ascertaining the real irrigating capacity of wells by the help of the harvest inspection registers (paragraph 387) and the danger of accepting without enquiry the apparent rent as the true rent of *chahi* land (paragraph 389) have already been noticed.

437. Tendency to overassess well lands.—There is little doubt that the tendency of the early Punjab settlements was to make the assessment of well land relatively severe. Thus, in reviewing the final settlement report of Jullundur, Sir J.B. Lyall remarked: (the Lieutenant-Governor) "is disposed to hold, as he did in the case of the Ludhiana settlement, that in fixing the revenue rates finally sanctioned, there was a tendency to put the rates on.....well-irrigated land too high as compared with the rates on unirrigated land. The difference seems much greater than is justified by the estimates in the assessment reports of the relative values of the soils.....However, if this mistake was made, it may be said to have been generally rectified by the people in distributing the demand, as it will be seen from.....the final report that they never put on *chahi* land more than double what they put on unirrigated land, and often put considerably less on it. In so doing they may have gone beyond the equities of the case, and it is probable that the rates on unirrigated fields by their distribution are often in excess of half the net assets of such fields, but their tendency seems preferable to our tendency to pile the revenue on to well-irrigated lands which seems to be to some extent an unfair tax on industry and capital expended on the land. His Honour considers that we have inherited this tendency from the Sikhs, in whose cash assessments of villages it was painfully apparent, as he knows from early experience in Gurdaspur and other districts. But the Sikhs' only principle was to take as much as could be got without causing cultivation to be abandoned. It is true, as Mr. Purser lays down in one of his assessment reports, that the revenue rates for a fixed demand must take into account not only the average produce on a term of years, but also its regularity, and it is no doubt this consideration which made Mr. Purser assess irrigated lands higher on the produce than unirrigated. But it was Mr. Purser's *chahi* rates which were oftenest raised by Major Wace and Sir William Davies, though, in His Honour's opinion, Mr. Purser had himself pushed his principle quite far enough, if not too far."

438. Elasticity in well assessments formerly discouraged.—In a district assessed for a long term cases of hardship may arise from the breaking down or disuse of wells which were at work at settlement before its period has expired. The argument against remitting the revenue on

wells when they fall out of use is that, if the State foregoes the assessment of abandoned wells and at the same time exempts the land served by new wells from a wet assessment for twenty years, its receipts will slowly contract till a new settlement is made, the inducement to repair or replace a worn-out well will be weakened and the principle that the members of each village community are jointly responsible for the whole sum assessed on the estate will be infringed. That principle is, however, asserted by exercising the power of ordering a redistribution of the revenue over holdings (Act XVII of 1887, section 56), but this remedy has been rarely, if ever, applied. For long the above argument prevailed. As late as 1895 a proposal to make such well remissions as are referred to above a common feature of settlement policy was rejected by the Financial Commissioner, Sir Mackworth Young, and the Lieutenant-Governor, Sir Dennis Fitzpatrick, on the ground that to do so "would be contrary to the principles of our system, would remove an important incentive to thrift and industry, and, if accompanied, as it would necessarily be, with an arrangement for at once bringing under irrigated rates lands for which new wells were constructed during the currency of a settlement, would.....be most distasteful to the people."*

439. Mr. Steedman's semi-fluctuating system of well assessment.—But some exceptions had already been allowed in practice. The case of upland wells in the south-western districts was felt to be peculiar. The difficulty of keeping such wells continuously at work is great. In bad seasons there is no natural grass, and the rainfall is always too scanty for the raising of fodder crops on unirrigated land. The well ceases to be profitable in a season in which a very large part of the crops has to be sacrificed simply to keep the bullocks alive. Prolonged drought means desertion of tenants. It would be hard to make the owners of the other wells pay the assessment of the disused well when they have managed with difficulty to keep their own wells going. It would be especially harsh to do so when, as so often happens in the south-western Punjab, the well-owners are not united by any bond of common ancestry or common village life, and joint responsibility is an incident violently engrafted on a tenure with which it has no natural connection. To meet such cases a compromise was adopted in Mr. Steedman's settlement of the Jhang district. His plan has often been described somewhat vaguely as "the semi-fluctuating system of well assessment."

It was not applied to riverain tracts. The demand on each well in an upland circle was a fixed sum, but it was provided that it should only be collected when the well was worked. New wells were assessed at lump sums fixed beforehand by the Settlement Officer for each estate, and intended to be more lenient than the assessment he had imposed on existing wells. The demand was collected after the well had been in use for three years.† The plan proved well suited to local conditions, and it was afterwards extended to parts of the Shahpur, Multan, Mianwali, Muzaffargarh and Gujranwala districts.‡ In the latest developments of the system the tendency has been

*Punjab Government No. 212-S., dated 21st June 1895.

†Paragraphs 183—196 of Mr. Steedman's Settlement Report of Jhang.

‡Settlement Reports, Shahpur, paragraph 105, Multan, paragraph 34, Muzaffargarh, Appendix VII-C., Government orders on Assessment Report of Hafisabad and Khangarh Dogran, paragraph 5.

to lengthen the period during which new wells are exempted from assessment. Rules of assessment similar in character, though more limited in their scope, were sanctioned for parts of Lahore, Montgomery, Jhelum and Dera Ghazi Khan at the settlements of these districts between 1888 and 1898.* In the Karnal-Ambala settlement (1888-89) the remission in the case of any well falling permanently out of use of the *abiana* or lump water advantage revenue which had been imposed on wells was sanctioned.†

440. Imposition of a lump sum as *abiana* how far permissible.—Mr. Prinsep's *abiana* system was disallowed by Government (paragraph 64). Provided, however, that the *chahi* assessment is determined in the same way and fixed for the same term as that of unirrigated land, it may be found of advantage in connection with the *bachh*, and more especially where any remissions of well revenue during the term of settlement are contemplated, to treat the difference between the assessment of the land served by a well at wet and dry rates as a separate item represented by a lump sum.‡ In parts of the country where rain crops are almost unknown this *abiana* may be the whole assessment of the well lands.

441. Existing rules regarding well remissions.—The decision referred to at the close of paragraph 438 was reconsidered in 1904, and the following rules, which apply to all tracts for which special local rules have not or may not hereafter be sanctioned, were issued.§ They have been incorporated in the new rules framed under section 60 of the Land Revenue Act and made applicable to tube-wells also (see Appendix I-E):—

I.—The Deputy Commissioner shall remit so much of the assessment on the land irrigated from a masonry well as is based on the profits of irrigation from such well—

- (a) when the wells cease to be fit for use ;
- (b) when irrigation from the wells is superseded by canal irrigation, and canal advantage revenue or owner's rate has been imposed.

II.—The Deputy Commissioner may grant a similar remission if the well, though still fit for use, has been out of use for four harvests, provided that no remission shall be given if the disuse of the well—

- (a) occurs in the ordinary course of husbandry, the well being intended for use merely in seasons of drought ;
- (b) is due to the introduction of canal irrigation, and canal advantage revenue or owner's rate has not been imposed.

NOTE.—The revenue based on the profits of irrigation from the well shall ordinarily be assumed to be as follows:—

- (i) where a lump sum has been imposed at the distribution of assessment on the well in addition to a non-well rate—such lump sum ;

*Settlement Reports, Lahore, paragraph 106, Montgomery, paragraph 59, Dera Ghazi Khan, paragraph 69.

†Karnal-Ambala Settlement Report, paragraph 37, Punjab Government No. 270, dated 11th May 1894, paragraph 4.

‡Karnal-Ambala Settlement Report, paragraph 36; Wells in Multan (Settlement Report, paragraph 34) and Muzaffargarh (Settlement Report, paragraph 51) pay a lump sum *abiana*.

§Punjab Government No. 1613-S., dated 22nd August 1904, and No. 6, dated 8th January 1907.

- (ii) where a lump sum, inclusive of a non-well rate, has been imposed at the distribution of assessment—such lump sum after deducting the equivalent of the non-well rate ;
- (iii) where the distribution of the assessment has been by soil rates—the difference between the actual assessment of the area irrigated and the amount which would have been assessed on that area if it had not been irrigated.

III.—Cases may occur which will not be sufficiently met by the remission of only so much of the assessment as is based upon the profits of irrigation from the well. Such cases should be referred through the Commissioner for the orders of the Financial Commissioner.

IV.—In deciding whether to use the discretion given to him by rule II, the Deputy Commissioner shall consider whether the disuse of the well is due to some cause beyond the control of the land-owner, such as the spread of salts in the soil, the loss of tenants or cattle and extreme difficulty in replacing them.

V.—Except with the sanction of the Financial Commissioner, no remissions shall be given under these rules unless the distribution of the assessment of the estate has been made in one or other of the ways described in the note to rule II.

VI.—When a remission is granted, it shall take effect from such harvest as the Deputy Commissioner may determine.

VII.—If a new well is made to irrigate the land attached to a well in respect of which remission has been granted under these rules, or if such well is repaired, the re-imposition of the assessment will ordinarily be effected in accordance with the rules for the grant of certificates of exemption contained in paragraphs 505 to 508 of this Manual.

VIII.—Where a well for which a remission has been given is again brought into use, and no certificate of exemption is granted, as, for instance, on the return of tenants or by reason of replenishment of cattle, the Deputy Commissioner shall re-impose the whole of that portion of the assessment which was remitted with effect from such harvest as he may determine.

If in any case the Deputy Commissioner thinks the whole should not be re-imposed, he should report the case for the orders of the Commissioner.

IX.—These rules may be applied, so far as they are applicable, to the grant of remissions in the case of other irrigation works constructed at private expense, such as canals, water-courses, dams, embankments, reservoirs and masonry *jhalars*. They may also be applied to wells which, though only partially lined with stone or brick, are expensive to make and may ordinarily be expected to last for some years.

Changes in the fixed land revenue roll necessitated by the remission or re-imposition of well assessments either under these general rules or under analogous special local rules, as approved, *e.g.*, for parts of Montgomery, Dera Ghazi Khan and Muzaffargarh, should be reported once a year on 1st September for orders in the form of comparative demand statement prescribed by paragraph 9 of Standing Order No. 81.

It is obligatory to remit the wet assessment on a masonry well when it ceases to be fit for use from any cause whatever, and also when irrigation from a well becomes superseded by canal irrigation and a *nahri* assessment in one form or another has been imposed. In other cases of wells falling out of use discretion is left to the Deputy Commissioner, but the intention is that he shall ordinarily exercise that discretion, and on cases falling under rule II coming to his notice grant the remission allowed by that rule. In riverain tracts, however, caution must be exercised in applying rule II, for there a well may be unused for years, though fit for use, because irrigation is, owing to the character of the seasons, superfluous.

Where a discretion has been left to the district officer, it is fair that ordinarily action should be taken only on an application made by an owner of a disused well, though there is no objection to the Deputy Commissioner's acting on his own motion and initiating enquiry in special cases. But when a well has obviously become quite unfit for use, the reduction of the assessment is on a par with the remission of land revenue for calamity of season or in consequence of river action. Such cases should be reported to the Deputy Commissioner by the subordinate revenue staff as part of their ordinary duties. Before any remission is granted under rule I, the well should be inspected and reported on by the field *kanungo* and either the *naib-tahsildar* or the *tahsildar*. The Deputy Commissioner and the Revenue Assistant should make a point when on tour of verifying these reports as far as possible.

It will be noticed that no remission can be granted under these rules, except with the Financial Commissioner's sanction, if the distribution of the assessment has been made by an all-round rate on the cultivated area without regard to soil distinctions. If the majority of the land-owners in an estate feel aggrieved by the refusal to grant a remission in such a case, it is open to them to ask the Deputy Commissioner to exercise the power of revising the distribution of revenue over holdings given by section 56 (2) of the Land Revenue Act.

442. Chahi-sailab rates.—Where the mixing of watering from wells with flooding is common, the spring crops are usually sown on lands soaked with flood water and matured by well water, while the autumn harvest depends mainly on the river, but may require a final watering from the wells after the floods subside. It may be necessary to have higher rates for lands which possess a double source of moisture than for those dependent solely on wells. But sometimes the inferiority of the lands at a distance from the river as regards water-supply may be compensated by better soil and greater facilities for manuring.

443. Classification of canals.—The methods of land revenue assessment of canal-irrigated land adopted at different times have been noticed in the historical part of this Manual (paragraphs 51, 59 to 62, 72, 85 and 86-B). A brief summary of the systems at present in force may be usefully given here. The primary classification of the canals of the province is into perennial and inundation canals. The former have in the Punjab in the case of all the larger works been made at the expense of the State. Inundation canals are fed by the rise of the rivers during the summer rains and cease to flow when the rivers shrink to their cold-weather level. Some

of them have been constructed or acquired by Government, others are still owned and managed by private persons. In a third class, which includes most of the inundation canals of the province, the irrigators and Government are jointly interested, though it would be impossible to state in any definite way the degree of interest possessed by each of the two parties in any group of these canals, or even in any particular work. Sir James Lyall has given a good account of the origin of the numerous canals of this class which were in existence at annexation—

“Irrigation works of the nature of canals or water-courses from rivers or streams were almost always constructed by the joint action of the ruler or his representative or assignee and of the *zamindars*.....Most of the work was done by the unpaid labour of the *zamindars* and their dependents, but the ruler supplied direction and driving-power and often supplied some paid labour, or fed the gangs of unpaid labourers while at work. Irrigation works constructed in this way may.....be said to have been the joint property of the State and the irrigators, and their maintenance continued to be in much the same proportion as their construction the joint concern of the State and the irrigators, the actual labour being ordinarily supplied by the irrigators, the State only assisting by direction and enforcement of united action, and occasionally expending money on critical occasions. In some cases, however, the State regularly shared the cost of maintenance with the irrigators. The State left the irrigators to manage the maintenance of works and distribution of water as much as possible for themselves, but it interfered as often and as much as it thought necessary, and in some cases had to take almost the entire management into its own hands. This interference and management were generally exercised through the *kardars* and village revenue officials as part of the ordinary revenue administration of the country, but in many cases special canal officials of petty grades were appointed and paid by a special cess imposed on the irrigators”* (selections from the Records of the Financial Commissioner's office, New Series, No. 8, page 510).

The following is a rough, but convenient, classification of Punjab canals from the point of view of an assessing officer:—

A. Perennial State canals.

B. Other canals, mostly inundation, but including some small canals of perennial flow in submontane tracts.	}	(1) State. (2) Shared. (3) Private, including canals owned by local bodies, such as the District Board.
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444. Water-rates or occupier's rates.—The State as a canal-owner is clearly entitled to recover the price of the water it supplies from the person who uses it. The relations of the two parties do not differ essentially from those of any other buyer and seller. But in fixing the price it will charge, the Government will naturally consider many things with which the managers of a water company seeking to sell the commodity in which they dealt to the best advantage would have no concern. The private owner

*A notable instance in more recent times of co-operation between the rulers and the ruled for the execution of irrigation works is furnished by the history of the Ferozepore inundation canals.

of a canal has also a right to take from the irrigators a price for the water. The price of canal water is usually levied by an acreage rate known generally as "water-rate" or "occupier's rate." The latter is the term employed to describe the charge in The Northern India Canal and Drainage Act (VIII of 1873). On State canals as a rule differential crop rates are imposed, one factor in determining the pitch of the rate being the amount of water ordinarily required to ripen the particular crop; another is the additional value of the outturn of the crop per acre due to irrigation which accrues to a farmer cultivating his own lands after deducting the increased cost of production. This can best be ascertained by comparing the rents per acre paid by tenants-at-will in the same neighbourhood for *nahri* and *barani* lands and deducting from the sum by which the rent of the latter exceeds that of the former the difference between the land revenue at *nahri* and *barani* rates. In the case of the class of canals described as "shared" the State is not entitled to levy an occupier's rate equivalent to the full price of the water supplied. But it has a right to recover in some form or another interest on any capital expenditure it may have incurred on improvements, and also the cost of management and of annual clearances so far as these are not effected by the irrigators themselves.

445. Canal-advantage rate, owner's rate and *nahri* paria.—The State, as supreme landlord, has a right to a share of any increase of rent due to the introduction of canal irrigation by its own agency or by that of private individuals. As a canal-owner it might have pitched the occupier's rates so high as to prevent any such rise of rent, but it has not been the policy of Government to exclude land-owners from participation in the profits arising from improvements effected at its expense. It is reasonable that in the case of canals owned by private individuals the State should have power to limit the amount that may be levied as water-rate, otherwise no margin of profit might be left on which to base a claim to assess the land in its irrigated aspect.* The enhanced assessment claimable on account of the introduction of canal irrigation may be determined in two ways. The land may simply be rated as irrigated, no attempt being made to discriminate the portion of the assessment which is due to irrigation. This is the method by which the lands watered by perennial canals were assessed in our earliest settlements (paragraph 51), and the assessments of lands dependent on some of the inundation canals are still of this description. Mr. Prinsep initiated the plan of dividing the assessment into two parts, the first representing the revenue claimable from the land in its unirrigated aspect, and the second that arising from the land-owner's increased profits due to irrigation. The latter is described as "water-advantage revenue" or canal-advantage revenue (vernacular *khush haisiyati*). This revenue Mr. Prinsep took by means of a water-advantage rate levied on the area irrigated at each harvest (paragraphs 59 to 62). The owner's rate defined in paragraphs 87-89, Act VIII of 1873 (The Northern India Canal and Drainage Act) was the water-advantage rate under another name (paragraph 72). The owner's rate is now no longer imposed in the Punjab, its place having been taken on the Agra and Western Jumna Canals by a fixed canal-advantage revenue assessed on the area classed as *nahri*, i.e., the

*Section 89 of Punjab Minor Canals Act, III of 1905.

area commanded. The latter system was introduced on the Upper Bari Doab Canal in the districts of Gurdaspur, Amritsar and Lahore when between 1887 and 1892 they came under settlement after the great extension of canal irrigation which had occurred in the previous 20 years.

446. Assessment of lands watered by perennial State canals.—

There are thus now only two systems of assessment of land revenue on lands watered by perennial canals. The first is the fixed canal-advantage rate on area commanded which has been imposed on the older canals—the Western Jumna, Agra, Sirhind and Upper Bari Doab—and which is based on the cash rent paid on such land. The difference between that rate and the corresponding rate for unirrigated land is called the *nahri parta*, and is used for calculating during the settlements now current (1) the new revenue payable on land made irrigable by canal extensions since settlement, and (2) the revenue to be remitted on land from which canal irrigation has been withdrawn, by remodelling operations or otherwise, since settlement. The second is the purely fluctuating assessment levied on the area sown on the newer canals, *viz.*, the Lower Chenab and Lower Jhelum Canals and the canals of the Triple Project. For those the fluctuating system is more suitable for two reasons: (i) the assessable value of the land without irrigation is little or nothing, and (ii) it is necessary on new canals that the engineers should have a free hand in varying the distribution of water with extensions and improvements, and the simplest method of allowing for variations in distribution is to have an entirely fluctuating assessment. It is hoped that in time, when conditions of irrigation have become established, the fixed assessment system in force on the older canals will be extended to the newer ones also.

447. Provisions to secure elasticity in case of nahri parta.—

As observed above, it may be necessary to remit the *nahri parta* if irrigation is permanently cut off by the action of the Canal Department, and on the other hand some provisions have been made for the assessment of lands irrigated for the first time during the currency of a settlement. These differ in different districts, and need not be further noticed here. They may be held to be infractions of the principle of leaving to the land-owners the benefit of all improvements and extensions of cultivation made during the term of settlement, but the improvements and extensions are in this case far more due to the expenditure of money by the State than to the efforts of the proprietors.

448. Assessment of lands irrigated from State inundation canals.—Inundation canals owned by the State stand on exactly the same footing as the perennial canals. Thus, in the case of the Government canals of the Shahpur district, occupier's or water-rates are levied as the price of water and a fluctuating owner's or water-advantage rate as land revenue. The same system prevails on the Sutlej canals in Montgomery and Lahore, which, looking to their past history, may be classed as State canals.

449. Assessment of lands irrigated from inundation canals not owned by the State.—No occupier's rate is chargeable by the State for crops watered from private canals, but in some instances, as, for example, in Shahpur; and in the case of the Michmi Dilazak Canal in

Peshawar owned by the District Board, a royalty has been imposed on canal-owners by Government as "lord of the waters of the great rivers." This is quite distinct from the canal land revenue assessment which in Shahpur is taken in the form of a fluctuating water-advantage rate. The land-owner who pays the revenue may or may not be the same person as the canal-owner who pays the royalty.* For the silt clearances of the canals of Kangra, Hazara, Sialkot, Peshawar, Kohat, Bannu and Ferozepore the irrigators are primarily responsible, and the same system was formerly in force in Multan and Muzaffargarh. The work is carried out under the *chher*† or *tinga* system, the essence of which is that every irrigator is bound to furnish his share of labour, or in default to pay a fine known in some districts as *nagha*. In the Bannu district a moderate wage is paid to the persons who attend to perform customary labour. In Ferozepore the irrigators are paying a consolidated rate per *ghumaon* fixed by the *Jalsa Bachh* from time to time. In some cases a small cess is also levied to pay for a controlling and clerical establishment in the Bannu district contribution equal in amount to the irrigation cess is made by the Government. Where the canals are managed by Government, the fine, or *zar-i-nagha*, fund is mainly spent on the provision of hired labour for silt clearance. The amount of interference exercised by the State varies immensely. The extremes are represented, on the one hand, by the canals of the Himalayan and sub-Himalayan districts, where, the work being light, the help of the authorities is rarely invoked, and the canals are practically private irrigation works, and on the other, by those of Multan and Muzaffargarh, which are managed by officers of the Irrigation Department. Should *chher* labour at any time be abolished, it will become necessary to impose a working expenses' rate, which in practice will not be distinguishable from a light occupier's rate.‡ Such a rate was introduced at the settlements of Multan and Muzaffargarh in 1900 and 1901. In some of the above-mentioned districts the canal land revenue demand has taken the form of a fixed *nahri* assessment. This is suitable whenever the supply of water is abundant and regular. In Ferozepore, in addition to the fixed unirrigated assessment, a fluctuating water-advantage rate was imposed. Canal lands in Multan, with a few exceptions, now pay a purely fluctuating assessment. In Muzaffargarh the demand is in some tracts fixed and in some fluctuating. In Dera Ghazi Khan the *chher* system has never been in force under British rule. In the current settlement an occupier's rate open to revision after five years has been levied, and the land revenue demand has taken the shape of a light fixed assessment *plus* a fluctuating acreage rate on the area irrigated in each year.

450. Rights of assignees to owner's rate and *nahri parta*.—

When the water-advantage rate was first introduced in Mr. Prinsep's settlement of the districts watered by the Upper Bari Doab Canal (paragraphs

*In section 8 of the Punjab Minor Canals Act, III of 1905, the term "water dues" was substituted for "royalty."

†In the south-western districts a gang of labourers working on a canal was called *chher*, and each member of the gang a *chhera* (see sections 26 and 27 of Punjab Act III of 1905).

‡The history of these canals (see paragraph 443), and the nature of the rights which the people possess in them, will make it undesirable to impose a full occupier's rate in addition to a land revenue assessment at irrigated rates. For the provisions of the Punjab Minor Canals Act, III of 1905, see the Land Revenue Administration Manual, paragraph 787.

61 and 62), a question arose as to the right of *jagirdars* to enjoy the income derived from it in respect of the lands whose revenue had been assigned to them. A few years later the matter was further discussed in connection with Mr. Purser's canal assessments in Montgomery and the newly introduced owner's rate on the Western Jumna Canal. Finally, in 1882, the rules contained in Appendix XXIII were published with the approval of the Government of India. The principles underlying these rules are—

- (a) that new assignments of land revenue shall convey no title to owner's rate or water-advantage rate, and
- (b) that in the case of old grants the rate shall only go to the assignee if the land, in respect of which it is levied, was irrigated when the assignment was made or at the first regular settlement, and the assignee has hitherto enjoyed from it an irrigated revenue either in the form of owner's rate or of a fixed *nahri* or *chahi* assessment.

The claims of *jagirdars* to *nahri parta* have been treated in the same way.* In 1905 difficulties arose in regard to the apportionment of the share of assignees in the case of areas which have been brought under cultivation by means of State canals, and which, owing to the absence of rain and the depth of the sub-soil water, could hardly have been cultivated by any other means. The Government of India ruled† that, where there is an owner's rate or *nahri parta* or canal-advantage rate, Government should appropriate the equivalent of the rate, leaving the rest of the revenue (or share of the revenue) to the assignee. Where there is no such standard, the local Government must determine how to secure from the assignees such payments on account of the extension of canal irrigation to their estates as would fairly represent an owner's rate, if such existed. Whether this can best be done by assuming a dry rate for all lands, either irrigated or not was left to the local Government to decide.

On the Upper Chenab Canal, where the assessment on *nahri* is fluctuating, and on other soils either fixed or fluctuating, the decision of the local Government‡ allowed the *jagirdar*—

- (1) all fixed assessments which he enjoys at present, and in addition,
- (2) the total amount of all fluctuating assessments on *chahi* and *barani* crops in *jagir* estates, and
- (3) the amount obtained by applying to the area of *nahri* crops in each such *jagir* estates under fluctuating assessment the *barani* crop rate sanctioned for the estates—the difference between that amount and the total fluctuating assessment of the *nahri* crop at the *nahri* rate sanctioned for the estates being treated as *khalsa* and credited to Government.

*See Mr. Grant's Settlement Report of Amritsar, paragraph 59, and Sir M. O'Dwyer's Settlement Report of Gujranwala, paragraph 125.

†Government of India, Révenue and Agriculture Department, No. 144-226-6, dated 11th February 1909.

‡Punjab Government letter No. 42 (Rev. & Agri.—Irrgn.), dated 19th March 1914.

451. Assessment of chahi-nahri land.—Where some of the land reached by the water of an inundation canal is also served by wells, the existence of this double source of irrigation may justify an assessment higher than that of land dependent solely on canal or well water.* There is some difficulty in dealing with such cases where the *nahri* assessment takes the form of fluctuating water-advantage rate. In Lahore one-third of the *chahi-nahri* land was treated as *chahi* and the remainder as *nahri* in the assessment calculations.†

452. Mixture of water from inundation canals and river floods.—The mixture of irrigation from wells and inundation canals is voluntary and beneficial, while the mixture of canal water and river spill is often involuntary and harmful. The control of the waters in inundation canals is often very imperfect, and the bursting of a weak bank may send it where it is not wanted. In Ferozepore land which is ordinarily affected by river floods has been shown in the village map as a separate *sailab chak*. No water-advantage rate can be charged on account of canal water within the limits of such a *chak*.‡

453. Varied and variable quality of sailab land.—The value of the silt carried in suspension by the rivers of the province, small and great, varies immensely, and the nature of the deposits left when their floods subside differs in different parts of the course of a stream and also in the same part in different seasons. Changes in the channels of many rivers take place year by year, cultivated lands are swept away or slowly sucked into the river bed, while elsewhere fresh land is being exposed. Hence *sailab* land is in quality, both varied and variable, good and bad soils are often found close together, and land which is fruitful in one year may be a sandy waste the next.

454. Diversity of sailab rates.—The treatment of *sailab* land in assessment in different parts of the province must therefore be very diverse. Along the upper reaches of the Jumna, where the rainfall is copious and the river deposit sandy, flooded land has been rated much below land dependent only on the rainfall: while, on the other hand, the combination of rich silt and a scanty rainfall has led on one part of the course of the Jhelum to the *sailab* rate being pitched higher than the *chahi* rate. Inside riverain assessment circles much discrimination is requisite in making the village assessments.

455. Alluvion and diluvion rules.—But, however carefully a Settlement Officer may fix his demand on an estate, a single season may upset the conditions on which it was founded. A fixed assessment for a long term of years is therefore unsuited to the circumstances of villages subject to river action, but it is often possible to give the land owners the benefit of a fixed revenue for the greater part of their lands, confining the yearly readjustment of the demand to those portions of the estate which have gained or lost in the past season. After the example of the North-Western Provinces this mode of dealing with riverain villages was adopted in the early Punjab settlements, and it is still in force in most districts. In the

*See, e.g., Mr. O'Brien's Settlement Report of Muzaffargarh, page 113.

†See Mr. Casson Walker's Chunian Assessment Report, paragraph 25.

‡Punjab Government No. 24, dated 4th February 1892.

Land Revenue Acts provision was made for the annual revision of the demand in the case of lands affected by river action (section 41 of Act XXXIII of 1871, section 59 of Act XVII of 1887). This operation is sometimes known as an alluvion and diluvion assessment, but the changes due to streams are by no means confined to mere gain and loss of land. Rules on the subject issued under section 41 of the first Land Revenue Act will be found in Financial Commissioner's Standing Order No. 26. The scope of these rules has been greatly narrowed in two ways. Since they were first published, a purely fluctuating system of assessment for riverain tracts has been adopted in some districts in the west and south-west of the province, where the action of the great rivers is specially violent and far-reaching. But, besides this, defects in the rules themselves have led to their supersession in many districts by special rules drawn up by the Settlement Officers and sanctioned as part of the settlement arrangements. The chief blot in the rules issued under the Land Revenue Act of 1871 is that they left too much to the discretion of the assessing officer. It was easy for a *tahsildar* or Extra Assistant Commissioner to find out what revenue should be remitted on account of diluvion, but, when it came to assessing new land or lands which the floods had benefited or damaged, he was often very much at sea. The intention was that the land should be assessed according to its quality, subject to the proviso that the "full settlement" rate should in no case be exceeded. But there was a tendency to put excessive rates on uncultivated land thrown up by the river on the ground that it ought to be cultivated, and there was no guarantee that the assessment would be either equal or equitable. The "settlement rate" was often taken to mean the rate at which the revenue had been distributed in the *bachh*, and this might vary far more widely from estate to estate than any difference, past or present, in the character of the *sailab* land justified. For example, one village might have found it convenient at settlement to distribute the whole revenue by an all-round rate on cultivated land, while the next village might have adopted soil rates. One express provision forbade the revision of the assessment of land recorded at settlement as culturable waste, though its cultivation was evidently due to changes caused by river action. A piece of poor grazing ground might be covered with good silt and yield fine crops. But under the rules it continued to be revenue free or assessed at a nominal rate till the next settlement. These defects have been corrected in the special rules drawn up at the most recent settlements, the main feature of which is the division of the land into two or three classes, for which separate rates are fixed, the class to which any particular field belongs being mainly determined by the crop or crops grown in it. A light rate is also generally imposed on uncultivated land which is fit for grazing. At the same time the procedure connected with the measurement and record of changes due to river action has been greatly improved. A collection of these new rules has been issued (Selections from the Records of the Financial Commissioner's Office, New Series, No. 19).*

456. Tendency to overassess riverain tracts.—There was a tendency in some of the older settlements to overassess riverain tracts. Cultivation was then backward in the more arid uplands, and the refreshing

*On the subject of alluvion and diluvion—see also Chapter XII of the Land Administration Manual.

green of the river valleys was sometimes taken as a sign of abounding fertility. As a matter of fact, riverain tracts are as a rule weak tracts. The caprices of the river import into agriculture so large an element of chance that good farming is discouraged. At seed time the soil may be so wet that it cannot be worked up to a proper tilth, weeds are very troublesome, and ripened crops may be rotted, or garnered crops swept away, by an untimely flood. The climate is often bad, and for one reason or another the land-owners are frequently spiritless and thriftless. Even the men of hard-working tribes, who thrive elsewhere, are sometimes in a chronic state of debt and difficulty when their lot is cast near a river bank.

457. Assessment of barani soils.—In assessing *barani* lands in many parts of the Punjab it has been necessary to adopt very low rates on account of the scantiness and capriciousness of the rainfall. In such cases special attention has to be paid to the rate at which the demand falls on the average area of harvested crops (see paragraph 372). In a few of our earlier settlements there was a tendency to overvalue stiff clay soils. Where the rainfall is very small, the light sandy soils are the best. They bear good crops with wonderfully little rain; while, on the other hand, the result of very abundant moisture in reducing their yield is sometimes very striking.

458. Assessment of grazing land.—The imposition of a rate on new fallow was at one time common. The area now so recorded is usually very small, and is not assessed by the Settlement Officer, though it is likely enough that the proprietors in distributing the revenue over holdings will wish to put a portion of the demand upon it. Culturable waste should only be assessed when it is a source of separate profit to the land-owners. If they have only enough grazing land for their plough and well oxen and for the cows and goats needed to supply milk for household consumption, it should be exempted. In order to ensure that waste shall not be assessed under such circumstances, an amount of pasture land bearing a fixed portion to the cultivated area has sometimes been excluded from assessment and a rate applied to the remainder. In this way the grazing land in a village escapes assessment altogether when it does not exceed the amount assumed to be requisite for agricultural and domestic purposes.

459. Date trees : Mills.—In some districts the profits obtained by the sale of dates are assessed by levying a small rate, usually one anna or less, on each female date tree.* Flour mills turned by water-power are assessed in Peshawar, Kohat and a few other districts.†

460. Metals and minerals, quarries and spontaneous produce.—The law regarding metals and minerals, quarries and the spontaneous produce of the land has been explained in paragraph 191. Any gains accruing to the land-owners from the extraction of metals or minerals from the soil or river sand are not liable to assessment, but the orders of Government

*See, e.g., Mr. Tucker's Settlement Report of Dera Ismail Khan, paragraphs 555—557; Mr. O'Brien's Settlement Report of Muzaffargarh, page 115; Mr. Steedman's Settlement Report of Jhang, paragraph 210.

†See, e.g., Mr. Talbot's Settlement Report of Jhelum, paragraph 72; Mr. Tucker's Settlement Report of Kohat, paragraph 358; Mr. Thorburn's Settlement Report of Banna, paragraph 198; Mr. Dane's Settlement Report of Peshawar, paragraph 66; Mr. Watson's Settlement Report of Hazara, paragraph 60.

should be taken whether the proprietary title of the State is to be asserted by the imposition of a royalty.* This applies also to profits derived from any quarries, spontaneous produce of the land, etc., of which the State appears to be owner under the provisions of section 42 of the Land Revenue Act.

461. Assessment of land in civil stations and cantonments.—

Instructions regarding the assessment of land in civil stations and cantonments will be found in Appendix XV, in which have also been embodied instructions issued by the Government of India regarding the assessment of land in municipalities.

462. Failure to discriminate between strong and weak tracts and villages.—Experience has shown that there has been in some cases a tendency not to discriminate sufficiently between weak and strong tracts, and good and bad estates. A rich circle is let off too lightly and a poor one overburdened, and, in distributing the assessment resulting from the sanctioned circle rates over villages, enough boldness is not always shown in going freely above and below them in order to meet the varying circumstances of the different estates. This is a matter requiring special attention in the Punjab, where the prevailing custom of dividing the crop between the landlord and the tenant, instead of taking a cash rent, obscures the differences in the renting value of the land in different villages. The more carefully a Settlement Officer makes his village inspections, the less likely is he to fall into a blunder of this sort.

*See, e.g., Mr. Tucker's Settlement Report of Kohat, paragraph 359, as to gold washings.

CHAPTER XXVII.—Fluctuating Assessments.

463. Policy of assessment fixed for a term of years.—It was an essential feature of the land revenue settlement of North-Western India as expounded by Mr. Thomason that the demand should be fixed for a considerable number of years, and “that the proprietor should be allowed all the benefit from improved or extended cultivation which he may be able to obtain during the currency of the lease.”* This policy was far-sighted, and it has done much to promote the development of the land and the contentment of the people. It is no reproach to its authors that time has brought to light some practical inconveniences and drawbacks which they did not clearly foresee, and that it does not suit the agricultural conditions prevailing in some parts of the country with which they had no acquaintance.

464. Fluctuating assessments the chief innovation on Thomason's policy.—The greatest innovation on it made in the Punjab has been the adoption of a fluctuating revenue demand in many tracts in which the area of crops is liable to extreme variations. Under this system each harvest is separately assessed according to rates determined beforehand. The rates remain constant, but the acreage to which they are applied varies immensely with the character of the seasons. It was likely that a change of this sort would at first be resisted, and this, as we have seen (paragraph 51), is what actually happened.

465. Fluctuating assessments of canal irrigation.—The earliest instance of a partially fluctuating assessment in any regularly settled district is to be found in Mr. Prinsep's water-advantage rate scheme in districts traversed by the Bari Doab Canal. It was requisite there to find some plan by which the land revenue would share in the profits derived from the large expansion of irrigation which was likely to occur in the near future. A great extension of fluctuating assessments followed in the third period of Punjab Settlement 1871—78. The system of canal owner's rate, which is in substance the same as Mr. Prinsep's water-advantage rate plan, was prescribed in the Northern India Canal Act (VIII of 1879), and put into operation in the case of the districts served by the Western Jumna Canal. Both Mr. Prinsep and Sir James Lyall recognized the merits of a fluctuating assessment of the uncertain irrigation from the inundation canals in Montgomery, and the same policy has since been followed as regards irrigation of the same description in several other districts. The whole of the assessment of lands watered by the Sidhnai Canal in Multan and of the lands included in the new estates formed in the Crown waste commanded by the Lower Chenab and Jhelum Canals is fluctuating, the rates being levied on the acreage sown.

466. Fluctuating assessments of riverain tracts.—A further step taken under Sir James Lyall's advice was the adoption of fluctuating

*See paragraph 7 of “Remarks on the System of Land Revenue Administration prevalent in the North-Western Provinces” prefixed to the “Directions for Settlement Officers.”

assessments for *sailab* lands on the Indus, Chenab, Ravi and Sutlej, in four districts in the west and south-west of the province. The new system has since spread down the Indus into Dera Ghazi Khan, up the Ravi and Sutlej into Montgomery, and in the case of the latter river into part of Ferozepore, so that fluctuating assessments of *sailab* lands now prevail on both banks of the Indus from Bannu downwards, on the Ravi and Sutlej from the points where they leave the Lahore district to their junctions with the Chenab and on the last river in Multan and Muzaffargarh, and to a considerable extent also in Jhang and Gujranwala.

467. Other fluctuating assessments.—A larger area dependent on the very precarious floods of the hill torrents in Dera Ismail Khan, some villages on the Ghaggar in Hissar, the Sarusti in Karnal, and the Sahibi stream in Rohtak, and certain lands on the borders of *chambhs* or *jhils* in Gurdaspur, Gurgaon and Delhi have also a fluctuating assessment. The only *barani* tracts at first treated in the same way were a small group of estates in the Karnal Nardak and the Gandapur villages in Dera Ismail Khan. In the latter grain collections were practically in force. Proposals for a fluctuating assessment of the very insecure rain lands in the Pindigheb *tahsil* of the Attock district, where the fixed assessment had worked badly for some years after settlement, were rejected in 1892 in view of the practical difficulties involved and the opposition of the land-owners. At the resettlement of the tract in 1901 this decision was reaffirmed. But *barani* fluctuating assessments were introduced in Jhang and Gujranwala and in the Lower Chenab and Jhelum Colonies in 1904-05 when a similar assessment was put on canal irrigated land.

468. So-called fluctuating well assessments.—Well assessments subject to the special conditions described in paragraph 439 are sometimes called fluctuating assessments. The arrangements referred to do indeed represent a wide departure from a fixed village assessment of the normal type. The assessment unit is the well and the lands attached to it, not the village, and joint responsibility for the revenue is virtually abolished. The well holding no longer pays revenue when its assets disappear by the well ceasing to be worked, and new wells do not enjoy the long exemption from assessment which they obtain under an ordinary settlement. But the demand, so long as it exists, is fixed and does not vary with the character of the season and the acreage under crop. In *sailab* tracts under a fluctuating assessment special rates may be used for well crops, or the ordinary rates may be applied to the crops, and in addition a small fixed water-advantage revenue or *abiana* be imposed on each well, or the areas attached to wells may be marked off and put under a fixed assessment at irrigated rates, or the *abiana* may be fixed and lands not watered from the well in any year pay the *barani*, *sailab* or *nahri* fluctuating rate, as the case may be.* Purely fluctuating well assessments are sometimes found, e.g., in part of Gujranwala.

469. Sources of information.—It is needless to describe here the details of the fluctuating systems in force in different parts of the country. The chief sources of information on the subject are Selections from the Records of the Financial Commissioner, Old Series, No. 25, and Selections

*Multan Settlement Report, paragraph 34.

from the Records of the Punjab Government, New Series, No. XVII, Punjab Government Revenue Proceedings No. 3 of June 1882, Nos. 13-14 of October 1884, Nos. 23—33 of January 1892, and Nos. 3-4 of October 1892 and recent settlement reports of the districts in the south-west of the province.

470. Average income from fluctuating may be higher than fixed assessment.—One reason why a fixed demand has to be pitched very low in precarious rainland tracts is the doubt whether suspensions will be promptly given when required. But a varying assessment based on the average area of crops harvested meets the difficulty of suiting the demand to the outturn to a considerable extent. Hence it is quite fair that in the case of a fluctuating assessment rates should be adopted which will probably yield a higher average income than the fixed land revenue that might have been imposed.*

471. Option of fluctuating assessment during currency of settlement.—In a few cases where the cultivation is extremely precarious, but for one reason or another it has been considered unwise to impose a fluctuating assessment at settlement, a safety valve has been provided by making it part of the conditions of the settlement that the proprietors of an estate may at any time during its currency throw up their fixed assessment accepting instead a fluctuating one at rates determined by the Settlement Officer, and further that a fluctuating assessment may be compulsorily introduced with the sanction of the Financial Commissioner in the case of any village falling into arrears which it is unable to liquidate within a reasonable time.† The second condition is hardly necessary in view of the provisions of section 73 of the Land Revenue Act (XVII of 1887).

472. Suggestion for extension of fluctuating system to barani tracts.—There is room for much difference of opinion as to the wisdom of a far wider application of the system of fluctuating cash assessments in the Punjab than it has hitherto received, and especially as to the question whether it should or should not be adopted in those broad tracts where the scantiness and capriciousness of the rainfall render the unirrigated cultivation, on which they depend, exceedingly precarious. It may therefore be useful to note the general arguments for and against fluctuating assessments, the reasons which led to the abandonment of the received assessment policy on riverain lands in the west and south-west of the province, and the considerations bearing on the question of the extension of the system to precarious *barani* tracts.

473. Arguments for fixed assessments.—The merits claimed for the policy of fixed assessments for a long term of years combined with joint responsibility and rights of property capable of being inherited and transferred were the stimulus that would be given to the extension of cultivation and to improvements, freedom from the harassment to the people caused by official interference, this growth of habits of thrift, and the encouragement held out to the energetic and industrious to better their condition.

*Paragraph 3 of Government orders on Pipli Assessment Report in Revenue Proceedings of July 1888.

†See, e.g., the Financial Commissioners' Review of the Karnal-Ambala Settlement Report, paragraph 14.

Some weaklings might succumb, but their places would be taken by prudent and hardworking members of the same village brotherhood. Some communities of lazy cultivators might here and there have to give way to men of better castes. Land would become a valuable property and capital would be attracted to it. These expectations have in a very considerable measure been fulfilled where the agricultural conditions were at all favourable, and even in some cases where they might have seemed far from being so.* One important exception must be made. Capital was attracted to the land, but the new purchasers and mortgagees were in very many instances mere rent-receiving, non-improving landlords, and in some tracts transfers from the old agricultural classes to money-lenders grew to the proportions of a grave social evil. The legislation undertaken to check this evil has been described in the second chapter of the Land Administration Manual. It cannot be said that indebtedness and the transfers resulting from it are as a rule most rife in tracts where the agricultural conditions are most unstable, or that any close connection can usually be traced between them and fixity of demand or even a rigid method of collection. Thomason admitted that, where the tenure of land was such as we commonly find it in the Punjab, it might sometimes be necessary to suspend or remit revenue on the occurrence of disastrous seasons.† It is urged by the opponents of fluctuating assessments that an intelligent use of the suspension and remission rules and in the case of flooded lands of the alluvion and diluvion rules, will do all that is required for insecure tracts without disintegrating the village communities by getting rid of joint responsibility. The land-owners, they assert, view with well-founded dislike any system of assessment based on harvest measurements, the revenue subordinates will become corrupt, for effective supervision by hard-worked district officers will be extremely difficult. The value of land will be lowered and the standard of farming will fall, for each man will be content to exert himself just enough to win a bare subsistence from the soil.

474. Arguments on the other side.—It is argued on the other side that, wherever the outturn varies very widely with the character of the seasons, a fixed demand is unsuitable. It has to be pitched so low that Government receives much less than it would get from a moderate fluctuating assessment. But, however low it is put, the people have to borrow in order to pay it in bad seasons. It was supposed that with a fixed assessment the surplus of good would be kept to meet the deficit of lean years. But the habits and necessities of the people forbid this, save in exceptional cases, and the fruit of a rigid revenue system is debt and difficulty. Suspensions and remissions are intended to meet occasional calamities of season, and not cases in which extreme variations of area and yield are a normal feature of agriculture. The choice, on the hypothesis that suspensions are freely given when the harvests are short and the balances recovered in good years, lies between a demand fixed in name, but actually fluctuating in an unregulated and uncertain way, and one which is frankly fluctuating and subject to definite rules. Under the existing system the waste has been

*See, e.g., paragraph 10 of Settlement Commissioner's Review of Sirsa Assessment Report in Revenue Proceedings for June 1882.

†Paragraph 29 of "Remarks on the System of Land Revenue Administration prevalent in the North-Western Provinces" prefixed to the "Directions for Settlement Officers."

broken up more rapidly than would have been the case with a fluctuating revenue. But this is not an unmixed advantage, and, given an orderly government and a growing population, cultivation will spread under any system of assessment which leaves a fair profit to the farmer. A fixed assessment no doubt encourages the individual land-owner to improve his holding. But the improvements possible in tracts where the harvests are extremely fluctuating are not as a rule such as individual land-owners can effect. In high and dry upland tracts the sinking of wells is unprofitable, and works of improvement to control the floods of the great rivers must be the joint work of the proprietors of all the villages concerned, encouraged and directed by Government officials. There is far more likelihood that they will be efficiently carried out and maintained when Government has a direct and immediate interest in their success. It is perfectly true that the people are often averse to the introduction of fluctuating assessments. But dislike will disappear when the advantages of the new system are realized in practice. Their fathers were equally opposed to the substitution of a fixed cash assessment for fluctuating grain collections. The argument that half-yearly assessments are unpopular and demoralizing has lost much of its force now that proper harvest inspections have become a normal feature of revenue administration everywhere.

475. Fluctuating assessments should only be adopted where the fixed system had failed.—Fixity of demand when associated with a reasonable method of collection has been so widely successful, and fluctuating assessments are so troublesome to the administration, and often, it is to be feared, to the land-owners, that the new system can only be accepted as an unpleasant necessity under certain circumstances, and should be confined to the tracts where the failure of the older plan is manifest. The feeling with which any novel method of assessment is at first regarded by the people is a most imperfect test of its real merits, but it is a striking fact that, speaking only of unirrigated cultivation, fluctuating assessments were accepted more readily, and have since been looked upon with greater favour by the land-owners in the riverain lands in the west and south-west of the province than elsewhere.

476. View of fluctuating assessment taken in resolution of 16th January 1902.—The view unfavourable to fluctuating assessments is strongly expressed in the 36th paragraph of the resolution of the Government of India on land revenue policy dated 16th January 1902—

“The Government of India freely admit that a fluctuating assessment in the sense of an assessment without a definite maximum limit in cash, and annually varying with the outturn of the crops, is exceedingly difficult to work with fairness, throws an undesirable amount of power into the hands of subordinate officials, and lacks the influence for thrift which it has been the desire of Government to secure in its land revenue policy. It would be a retrograde step, and would imply a reversion to the methods of native rule.”

477. Sir James Lyall's views.—The reasons which led Sir James Lyall to advocate a fluctuating assessment in riverain tracts in the South-

Western Punjab may be gathered from the following extract from his review of the final Settlement Report of Dera Ismail Khan :—

“ In the Upper Punjab the authorized system carried out with a moderate discretion works well enough. The culturable waste is not nearly so extensive in comparison to the cultivated area as in the Lower Punjab, and is much less liable to change in character and extent, for the action of the river is not so capricious and violent. Moreover, the waste does not depend on the floods for cultivation, the moisture of the soil and the rainfall are sufficient, and therefore a Settlement Officer can reasonably take the culturable waste into account in assessing in the Upper Punjab.*

“ But in the Lower Punjab culturable waste lands in riverside estates are ordinarily very extensive as compared to the cultivated area, and no dependence can be placed on their remaining culturable for any time. Radical changes in the quality of large areas of soil occur frequently, and land culturable one year may become practically unculturable the next—without change of quality of soil—from a change in the nature or direction of the floods. Practically therefore a Settlement Officer cannot take into account culturable waste when assessing river villages in the Lower Punjab. Nor would there practically be any inequality caused in the Lower Punjab by assessing riverside villages on lands broken up from culturable waste, while the upland villages are exempt from such assessment. In such a country, where little or no *barani* cultivation is possible, it is only the riverside villages which can break up waste of considerable extent without expenditure of capital; the upland villages must make new wells or canal cuts before they can break up their waste, so that in practice it is not unequal treatment to treat the culturable waste as in one case included in the assessment and not in the other. Another point in which the Lower differs from the Upper Punjab is the suitability of a new redistribution of the revenue as an alternative to a reduction of the demand. In the Upper Punjab the villages are much smaller, and are nearly always owned by one or perhaps two families, which have divided the lands so that each man has a share in each quarter of the estate, and ordinary river action affects each man's holding much alike. These families also have common lands and common funds to fall back upon—a circumstance which much facilitates a new *bachh*. But in the Lower Punjab the village areas are generally distributed into independent holdings formed of single blocks known as wells or *pattis*, there are generally no common lands and no common income, or if there are common lands, they are often not available to all; thus where there are in the same estates superior and inferior proprietors, each of the latter often only holds his cultivated plot, and has no power to break up waste without permission. In the Lower Punjab therefore the river action makes changes in individual holdings too great to be properly adjusted by a new *bachh*, and moreover a new *bachh* is from

*Sir James Lyall was alluding to the rule which forbade the alteration of the assessment of culturable waste because it had become cultivated after settlement, even though its cultivation was clearly due to changes produced by the action of a river. This rule has disappeared in the special rules for alluvion and diluvion assessments referred to in paragraph 455.

the tenure of the village a very difficult operation.* Again the power of remitting revenue on land cut away or covered with sand is sufficient in the Upper Punjab, but in the Lower Punjab power is wanted to remit also on land thrown out of cultivation by failure of floods as above noted.

“Owing to the partial unsuitability of the authorized system other systems grew in some districts in an unauthorized sort of way; e.g., the plan of annual revision of assessment of whole villages or river *chaks* of villages by remitting or increasing at fixed rates on actual cultivation, which.....prevailed before settlement in Mianwali; a similar planprevailed in Mamdot of Ferozepore and also in the Fazilka *tahsils* of the Sirsa district.....These considerations led Mr. Lyall to question whether some such system as that in force in Mianwali ought not to be adopted in the districts of the Multan and Derajat divisions for all villages or parts of villages really subject to river action, as the authorized system was not sufficiently elastic and was also very unequal in its effects on different villages.....A certain number of villages on the Sutlej and Ravi had been either completely ruined or seriously impoverished by it; their old *sailab* lands had fallen out of cultivation owing to changes in the direction or in the character of floods, and they had failed to obtain remissions of revenue as the cause of their distress was not a cause recognized by the rules as giving a claim to reduction. Sometimes the floods had gone right away from the villages, which in some cases had lost all *sailab* cultivation till the river might take another turn; sometimes the floods had only changed their direction a little, and the villages had been able to cultivate new *sailaba* land in place of the old, but this land happened to have been formed after settlement, so a separate assessment was put on it in enhancement of the former *jama* and this proceeding, though clearly unfair, is not wrong by the letter of the rules. On the Chenab and Indus cases of villages actually ruined by failure of floods did not come under Mr. Lyall's notice; the floods from these rivers are more certain and the rates of assessment had been lighter; but in all the Multan and Derajat districts it appeared to Mr. Lyall that the authorized system had a tendency to produce very unequal effects, for, as above explained, a Settlement Officer cannot practically assess the culturable waste which happens to be in the village at time of settlement; so that a village which happens to have much culturable waste at settlement time may have for the whole term of settlement a great advantage over another which happened in that year to have little or none.

“These reasons, which had before caused Mr. Vans Agnew, Colonel Hamilton and other officers connected with the Multan division to press for a recognition of the necessity of a special system of assessment for these lands, led Mr. Lyall, after consulting the Settlement Officers working under him, to propose a fluctuating system of assessment on river lands in the Bannu, Dera Ismail Khan, Multan and Muzaffargarh districts.”

478. Suitability of fluctuating assessments for insecure barani tracts.—But from first to last Sir James Lyall doubted the policy of

*The 18th of the general aluvion and diluvion rules allowed relief to be given by redistributing the revenue over holdings, when some holdings had suffered, but the total assets of these estates had not decreased. If the assets had fallen, a reduction proportionate to the extent of the decline might be given, a new *bachā* being enforced¹.

extending a fluctuating system of assessment to precarious *barani* tracts. In 1880 when the question was discussed he held that the cases of flooded lands and *barani* lands were quite distinct. If the floods came, there was always some sort of a crop, but in rain lands a great breadth of crops might be sown, of which a large portion failed utterly. *Barani* cultivation in precarious tracts was of necessity of a gambling character. Under a fixed assessment, if rain fell at the proper season, the farmer sowed every acre he could and took his chance of enough rain falling to ripen his crops. Under a fluctuating system he would confine his sowing to a much smaller area, choosing those lands which from their position were most likely to receive and retain moisture.* It was most desirable that the necessity of obtaining yearly or half-yearly returns of cultivation "by more or less troublesome and annoying field-to-field inspections" should, if possible, be avoided. A better plan for *barani* lands would be the cycle system.† The objections raised in 1880 have lost a good deal of their point in consequence of the improved system of harvest inspection introduced some years later. Field-to-field crop inspections are now carried out on all estates whatever be the form of their assessment, and an attempt, more or less successful, is made to distinguish between crops which ripen and crops which wholly or partially fail. But Sir James Lyall retained to the end his opinion that fluctuating assessments were unsuited to *barani* tracts because their crops do not fall into one of two categories, but "vary with the rainfall through all gradations from nil through poor and fair to good or very good."‡

479. Sir Charles Rivaz's views.—The same line of argument was taken by Sir Charles Rivaz, as Financial Commissioner, in discussing the proposed introduction of a fluctuating assessment in Pindigheb—

"Here we have a poor, dry and stony country, with its cultivation depending almost entirely, upon a scanty, exceedingly capricious, rainfall and it often happens that in the same season some parts of the *tahsil* obtain good and opportune rain while other parts get very little. In riverain and other flooded tracts either there is a total failure of crops over large areas or, as a rule, a successful harvest, but what happens in a country like Pindigheb is that there is generally a crop of some sort on the ground, but its quality varies immensely through all gradations not only from village to village, but often in different parts of the same village. It is evident that, if a fluctuating assessment is introduced in a country like this, it must be imposed not on crops sown, but on crops successfully harvested, and reductions from the full rates must be allowed on fields where the out-turn is below the average. The work both of assessing the revenue and supervising the *patwaris'* assessment would be attended with peculiar difficulties. The *patwaris*, even with the best will to do the work honestly

*See paragraph 7 of Sir Denzil Ibbetson's Note in Appendix to Revenue Proceedings, No 6-A of July 1880. Sir James Lyall endorsed Sir Denzil Ibbetson's arguments.

†The cycle system is a system of collection and not of assessment, and need not be described here. Information regarding it will be found in Settlement Commissioner's No. 12‡, dated 4th April 1874, to the Financial Commissioner, and in the Punjab Government Revenue Proceedings for August 1874, October 1876, June and August 1882, and May and November 1890.

‡Paragraph 6 of orders on Muktsar Assessment Report in Revenue Proceedings of June 1891. Compare paragraph 5 of orders on Shakargah Assessment Report in Revenue Proceedings of April 1891, and paragraph 7 of orders on Phalia Assessment Report in Revenue Proceedings of January 1892.

would experience great difficulty in making a proper record of the quality of the crops for assessment purposes, that is, in calculating the partial remissions due on crops of inferior outturn (see instructions appended to *khasra girdawari* form), and they would be largely exposed to the temptation of making dishonest crop records in the interest of the cultivators, as any detailed supervision of their work by the *kanungos* and superior revenue officers would be hardly practicable under the circumstances."

480. Matter will not be decided without a practical trial.---

There were special reasons why a fluctuating assessment in Pindigheb would have been difficult to work, but the general arguments against the employment of such a system do not seem to be absolutely convincing. It is very hard to say whether the fluctuating system will succeed or fail when applied to a *barani* tract till it has been tried on a sufficiently large scale. As already noted, a considerable addition was made in 1904-05 to the *barani* area under fluctuating assessment.

CHAPTER XXVIII.—Term of Settlement : Temporary and Permanent Settlements : Redemption of the Land Revenue.

481. Schools of opinion as to proper term for settlements.—

In the historical chapters of this Manual some reference has been made to past practice regarding the term of land revenue settlements in Northern India. But before quoting the existing orders on the subject it may be well to notice the main schools of opinion, with reference to this important subject, the causes which have produced them, and the argument by which each has been in its turn defended. In the past fifty years the plan of very short settlements, by which may be understood those made for periods of less than fifteen years, has met with little support. Opinion has been divided between—

- (a) permanent settlements,
- (b) long term settlement for periods of twenty or thirty years according to circumstances, and
- (c) settlements for shorter terms.

The second policy, which may be conveniently described as that of Thomason, is that which has so far prevailed.

482. Original intention to give a permanent settlement to the old N.-W. Province.—It was the intention of Government, when a large part of the territories now included in the United Provinces were added to the Empire at the beginning of the last century, to give them after a short interval a permanent settlement like that made in Bengal in 1793 (paragraph 16). The prudence of carrying out this policy at an early date soon came to be questioned, especially by the Court of Directors. Doubts were expressed whether a permanent settlement could be safely carried out until the resources of the country had been better ascertained and the rights of individuals more certainly established than had been done in the rough settlements for short terms made before the passing of Regulation VII of 1822.* The resolution dated 1st August 1822,† which contained the instructions of the Government of India as to the action to be taken under that regulation, shows that the idea of making a permanent settlement had been indefinitely postponed.

483. Policy of temporary settlements for long terms adopted.—

In the school of Thomason the plan of a permanent settlement was entirely supplanted by the policy of a moderate assessment to be revised generally after thirty, or under special circumstances after twenty, years. The advantages claimed for long terms were the avoidance of the disquiet and harassment arising from frequent settlements and the stimulus to the development of the resources of the country which fixity of demand for thirty years would supply. From this development the State would, it was pointed out, reap in course of time much additional land revenue. But the growth of

*See Holt Mackenzie's Memorandum, paragraph 32.

†See paragraphs 58-9 and 68 to 73 of the resolution which forms the first paper in the volume of Selections from the Revenue Records of the North-Western Provinces Government, 1822-33.

prosperity would by no means be confined to the owners of land. The whole community would share in it, and in this way the sources of indirect taxation would be largely increased. Mr. Thornton's article in the *Calcutta Review* of December 1849, from which some quotations have already been made (paragraph 16), shows that Mr. Thomason was quite opposed to permanent settlements. He points out that the revenue-paying capacity of estates may be greatly altered within the term of a settlement from many causes, not to speak of the revolution effected by the opening of a railway or the excavation of a canal, and draws the practical conclusion that "the most carefully adjusted arrangements will..... require reconsideration when the conditions on which they are founded are thus liable to change."

484. Movement in favour of permanent settlement.—The Mutiny and the famine of 1860-61 for a time shook men's faith in the soundness of this policy, and a permanent settlement again came into favour. The country was soon to enter upon an era of rapid advance, but at the time the outlook was discouraging. No one expected any large increases of revenue, and the contentment of the people seemed the one thing worth striving for. It was a small sacrifice to accept some prospective loss of revenue if by doing so we could bind the land owners to our side by the strong chain of self-interest. Men whose revenue was fixed in perpetuity would, it was supposed, detest a change of Government as much as fund-holders in a European country.* The curious history of the rapid growth of opinion in favour of a permanent settlement, the acceptance of the principle of the proposal by the Secretary of State, Sir Charles Wood, in 1862, the gradual discovery of practical difficulties, the various attempts, all more or less abortive, to define the circumstances under which an estate should or should not be admitted to a permanent settlement, the revulsion of feeling under the influence of increasing prosperity and rising prices, may be read in Sir Auckland Colvin's Memorandum on the Revision of Land Revenue Settlements in the North-Western Provinces.†

485. Views of Sir William Muir in 1861.—In 1861 the benefits which Sir William Muir expected from a permanent settlement were—

- (a) saving of the expenditure incurred in periodical settlements ;
- (b) deliverance of the people from the vexations prevalent at every resettlement ;
- (c) freedom from the tendency to depreciation of property towards the close of each temporary settlement ;
- (d) prosperity arising from increased incentives to improvement and expenditure of capital ;
- (e) increased value of land ;
- (f) content among the people.

Some land revenue which might have been claimed after thirty or forty years might, he admitted, be lost. But a far greater enhancement of the revenue was to be looked for from the indirect return due to the vast improve-

* Secretary of State's despatch (Revenue) No. 14, dated 9th July 1862.

† Pages 61 to 74 of the Memorandum.

ment in the resources of the country which would spring from the fixing of the demand in perpetuity.

486. Revulsion of feeling in favour of established system.—

The case for a permanent settlement must rest largely on the fourth of these arguments. It was alleged that periodical settlements unjustly claimed for the State a share in the benefit of improvements made by the land-owners, and it was supposed that, if this were foregone, small ground for future enhancements would remain. But the rapid development of the country and the advance of prices after 1865 soon made it clear that a claim for an increased revenue might arise to an extent far greater than had been imagined from causes quite independent of the landlord's exertions. Apart from this, Sir William Muir felt constrained to admit in 1874 that it was questionable whether "in the present condition of the agricultural population" there was any force in the fourth of the arguments by which he had sought to prove the superiority of a permanent to a long-term settlement. In a vigorous minute dated 4th October 1873 the Lieutenant-Governor of the Punjab exposed the weakness of the case for a permanent settlement. But Sir Henry Davies was at most locking a closed door, for by that time all chance of Thomason's policy being disturbed had passed away.

487. Orders passed by the Secretary of State in 1883.—The discussion, however, was only closed in 1883, when the Secretary of State distinctly rejected the policy of a permanent settlement (Despatch Revenue No. 24, dated 22nd March 1883). His reasons briefly were—

- (a) the great practical difficulties of the measure ;
- (b) the experience of twenty years since 1862 had proved that, if the policy of that day had been carried out, much additional land revenue since obtained would have been lost ;
- (c) the field of indirect taxation had been narrowed, and not widened, since 1862 ;
- (d) the experience in Bengal showed that there is no reason to suppose that a permanent settlement is beneficial to—
 - (1) the tenants, or
 - (2) the landlords, to whom the supposed boon is originally granted. The tendency to the transfer of land to the commercial classes would probably be intensified ;
- (e) it is not generally admitted that the agricultural population is more prosperous in the permanently settled, than in the temporarily settled, districts of the North-Western Provinces.

The history of prices and the fall in the value of silver since 1883 have greatly strengthened the case against permanent settlements.*

488. Term of settlements in the Punjab.—The active discussion of the policy of a permanent settlement in the North-Western Provinces fell in the second period of the history of the Punjab settlements, and

*A selection of papers on the subject of "Permanent Settlements and Redemption of the Land Revenue in India" was issued in 1897 by the Revenue and Agricultural Department of the Government of India.

Mr. Prinsep's views on assessment problems were a good deal coloured by his belief that the demand in well-developed estates was about to be fixed in perpetuity. But, when the final decision as to the term of his settlements was made, the policy of Thomason was again in the ascendant, as it has continued to be to the present day, though the usual term for settlements in the Western Punjab was for some time twenty, and not as in the United Provinces thirty, years. During the second and third periods (1868—1879) of Punjab settlements the assessments of the districts lying in that part of the province which was annexed before the second Sikh war and consequently had had time to develop were sanctioned for thirty years,* while the rest of the province was settled for twenty years only, except Bannu and Hazara, which were settled for thirty years. A similar policy was followed during the remainder of the 19th century, but most of the districts settled since its close have reached such a stage of development that it has been possible to allow them a 30 years' term. It is only where extensions of canal irrigation are still in progress, or have been carried out so rapidly that it has been impossible to make the land revenue demand keep pace with them, or where other exceptional reasons exist, that a shorter period of 20 years or less has been decided on. Full details of the terms of past and present settlements will be found in Appendix III.

489. Policy of shorter settlements discussed.—The rapid development of the country and the great rise of prices during the past sixty years have made it difficult to take for the State—that is to say, for the community as a whole—the full share of the land-owner's profits to which it is entitled. The difficulties inherent in the revision of long-term settlements when the period of their currency was one of rapid change were heightened in the Punjab by the fact that the new assessment was rarely introduced promptly on the expiration of the term of the old one. In settlements made since 1885 the enhancements were often very large, larger in fact than would at one time have been considered prudent, but yet the demand fixed was generally much below the calculated half-net assets. One of the chief reasons for this divergence was the impossibility of taking *per saltum* the very large increases which were claimable under the half-net assets rule. The greater prominence given to the half-net assets as an assessment factor made divergences which would formerly have passed without much notice matters of serious criticism. Under the circumstances it is not wonderful that the curtailment of the ordinary terms of settlement from twenty and thirty, to say fifteen and twenty, years was discussed. Those who have supported the policy of shorter settlements argued as follows :—

“ The surrender of the State's full claim should not be continued for a longer period than is really necessary—otherwise present difficulties may recur in a more acute form in the future. Of the two great objections to frequent revisions of assessment, the harassment of the people and the discouragement of agricultural improvement which they involve, the former has been greatly reduced by the improved system of land records which has been introduced. As to the second, experience has shown that rent-receiving landlords rarely expend money on improving their estates, while the improvements of small self-cultivating proprietors, so far as they consist

*Hissar was an exception : the term for that district was 20 years.

of irrigation works, are covered by protective leases, while the extension of cultivation in waste land is made under the spur of necessity, and would only be slightly retarded by a reduction of the term of settlement. Long-term settlements were a doubtful benefit to the people. They led to an unhealthy inflation of a land-owners' credit and an increase of indebtedness." It has been urged on the other side that past practice has given the land-owners of the Punjab a reasonable expectation of terms of thirty, or at least twenty, years, and that any change would be viewed with dislike and suspicion—a matter of special concern in a province in which the land-owners form so large and important a section of the population, and further that, however we may improve our system, the resettlement of a district must always cause an appreciable amount of trouble to the people.

490. Orders of the Secretary of State.—In a despatch No. 117, dated 24th October 1895, the Secretary of State disapproved "of the policy of reducing the term of settlement in tracts that have heretofore enjoyed a twenty years' or thirty years' settlement merely on the ground that the revenue authorities find it inexpedient to impose the full amount of enhancement which might be justified by the investigations and arithmetical deductions made at the settlement."

In communicating these orders the Government of India remarked—

"Where a reasonable expectation of any term, whether thirty or twenty years, has been created in the minds of the people by past practice, that term should be adhered to as the normal term of settlement. In backward tracts and under exceptional circumstances shorter terms may be fixed, and such circumstances and conditions may also justify an abbreviation in the case of an individual district or portion of a district of the normal term. But it will not be sufficient, for the purposes of such justification, merely to show that it is inexpedient to impose at present the full amount of enhancement which a consideration of existing assets would warrant; it will be necessary to go further and show also that the present condition of the tract is such, and the development that may reasonably be anticipated so rapid, that, at the end of the normal term, if not abbreviated, it will probably be found impossible to secure to Government a reasonably full share of the assets as they may then be found to stand" (Government of India, Revenue and Agricultural Department, circular No. 27-383-2, dated 16th December 1895, paragraph 2).

491. The Government of India resolution of 1902.—At the beginning of the present century the question of permanent and temporary settlements was again considered. In a resolution issued by the Supreme Government on 16th January 1902 the advantages claimed for the permanent settlement of Bengal were shown to have little or no foundation in fact.

"5. The permanently-settled districts, as is well known, cover the greater part of Bengal, parts of the North-Western Provinces and Madras, and a few other isolated tracts. At an earlier period the school of thought that is represented by the present critics of the Government of India advocated the extension of the Permanent Settlement throughout India; and, although this panacea is no longer proposed, the Government of India are invited by Mr. Dutt to believe that, had such a policy been carried into effect 40 years ago, 'India would have been spared those more dreadful and

desolating famines which we have witnessed in recent years.' It is also stated by the latter in his letter upon Land Settlements in Bengal that, in consequence of the Permanent Settlement in that province, the cultivators are more prosperous, more resourceful, and better able to help themselves in years of bad harvest than cultivators in any other part of India, that agricultural enterprise has been fostered, cultivation extended, and private capital accumulated, which is devoted to useful industries, and to public works and institutions. The hypothetical forecast above recorded is not rendered more plausible to the Government of India by their complete inability to endorse the accompanying allegations of fact. Bengal, and particularly Eastern Bengal, possesses exceptional advantages in its fertility, in its comparative immunity from the vicissitudes of climate to which other parts of the country are liable, in its excellent means of communication, in its enjoyment of a practical monopoly of the production of jute, and in the general trade and enterprise which radiate from its capital city. But neither these advantages nor the Permanent Settlement have availed to save Bengal from serious drought when the monsoon failure, from which it is ordinarily free, has spread to that part of India. Omitting to notice the frequent earlier famines, that known as the Behar famine of 1873-74 (so called from the part of the Bengal Province most seriously affected), cost the State £6,000,000; while it can be shown that in the famine of 1897 there were at the height of the distress considerably more than $\frac{3}{4}$ million persons on relief in the permanently settled districts of Bengal, and that the total cost of that famine to the Bengal administration was Rs. 1,08,04,000 or £ 720,266 (as compared with a famine expenditure of Rs. 98,28,000 or £ 655,200 in Madras, and Rs. 1,26,37,000 or £ 842,466 in Bombay), and this although the daily cost of relief for each person was less (Rs. .081 in Bengal as compared with Rs. .104 in Madras and Rs. .106 in Bombay). If the figures of persons in receipt of relief in the permanently settled districts of Western Bengal were compared with those of the adjoining temporarily settled districts of the North-Western Provinces, where the conditions were closely similar, it would also be found that the percentage was more than half as high again in Behar as in the North-Western Provinces. The Government of India indeed know of no ground whatever for the contention that Bengal has been saved from famine by the Permanent Settlement, a contention which appears to them to be disproved by history; and they are not therefore disposed to attach much value to predictions as to the benefits that might have ensued had a similar settlement been extended elsewhere.

"6. As regards the condition of cultivators in Bengal, who are the tenants of the land-owners instituted as a class in the last century by the British Government, there is still less ground for the contention that their position, owing to the Permanent Settlement, has been converted into one of exceptional comfort and prosperity. It is precisely because this was not the case, and because, so far from being generously treated by the zamindars, the Bengal cultivator was rack-rented, impoverished, and oppressed, that the Government of India felt compelled to intervene on his behalf, and, by the series of legislative measures that commenced with the Bengal Tenancy Act of 1859 and culminated in the Act of 1885, to place him in the position of greater security which he now enjoys. To confound this legislation with the Permanent Settlement, and to ascribe even in part to the latter the

benefits which it had conspicuously failed to confer, and which would never have accrued but for the former, is strangely to misread history. As for the allegation that the Permanent Settlement has been the means of developing in Bengal an exceptional flow of public-spirited and charitable investment, while the Government of India are proud of the fact that there are many worthy and liberal-minded landlords in Bengal—as there also are in other parts of India—they know that the evils of absenteeism, of management of estates by unsympathetic agents, of unhappy relations between landlord and tenant, and of the multiplication of tenure-holders, or middlemen, between the zamindar and the cultivator in many and various degrees—are at least as marked and as much on the increase there as elsewhere; and they cannot conscientiously endorse the proposition that, in the interests of the cultivator, that system of agrarian tenure should be held up as a public model which is not supported by the experience of any civilized country, which is not justified by the single great experiment that has been made in India, and which was found in the latter case to place the tenant so unreservedly at the mercy of the landlord that the State has been compelled to employ for his protection a more stringent measure of legislation than has been found necessary in temporarily settled areas. It is not, in fine, in the Permanent Settlement of Bengal that the ryot has found his salvation; it has been in the laws which have been passed by the Supreme Government to check its license and to moderate its abuses.”

492. Considerations determining the period of settlement.—

In the 18th paragraph of the same resolution there is an important passage on the considerations which should determine the period for which settlements should run in the Punjab—

“Where the land is fully cultivated, rents fair, and agricultural production not liable to violent oscillations, it is sufficient if the demands of Government are readjusted once in thirty years, i.e., once in the lifetime of each generation. Where the opposite conditions prevail, where there are much waste land, low rents, and a fluctuating cultivation, or again where there is a rapid development of resources owing to the construction of roads, railways, or canals, to an increase of population, or to a rise in prices, the postponement of resettlement for so long a period is both injurious to the people, who are unequal to the strain of a sharp enhancement, and unjust to the general tax-payer, who is temporarily deprived of the additional revenue to which he has a legitimate claim. Whether these considerations, justifying a shorter term of settlement than thirty years, apply with sufficient force to the Punjab and the Central Provinces at the present time; and, if they do apply at the present time, whether the force of their application will diminish with the passage of time, are weighty questions to which careful attention will be given by the Government of India upon a suitable occasion.”

493. Term fixed when orders are passed on final settlement report.—Under the assessment instructions of 1893 no reassessment was to be fixed for more than twenty years, except with the permission of the Government of India. The Government of India under the revised instructions printed in Appendix I gave discretion to the Punjab Government to fix the period for which the assessment of each district was to be in force

provided it did not exceed thirty years, with due regard to the instructions issued by the Secretary of State in 1895, quoted in paragraph 490 *supra*, and to the principle stated in the extract from the resolution of 1902 which is given in paragraph 492 of this Manual. Fixing the duration of settlements is one of the innovations made by the Amended Land Revenue Act. Section 58-A provides that the local Government shall pass orders about it when confirming an assessment. The period is required to be fixed at forty years, except for areas where canal irrigation has been newly introduced. In such areas the minimum term of the first settlement after the introduction of canal irrigation shall be 10 years and of the second settlement 20 years. The maximum term in either case shall be 40 years. Urban areas are excepted from the operation of this law.

494. Redemption of land revenue and sale of waste land free of revenue.—A Settlement Officer may come across traces of two other schemes which sprang from the same causes as produced the movement in favour of a permanent settlement, namely, the redemption of the land revenue and the sale of Government waste land free of revenue in perpetuity. These measures had been suggested, partly with the view of encouraging the settlement of Europeans in India, as matters for consideration in Lord Stanley's despatch No. 2 (Revenue) of the 31st December 1858, and in 1861, shortly before leaving India, Lord Canning ordered their adoption. With reference to the redemption scheme he remarked—

“Increased security of fixed property and comparative freedom from the interference of the fiscal officers of the Government will tend to create a class which, although composed of various races and creeds, will be peculiarly bound to the British rule, whilst under proper regulations the measure will conduce materially to the improvement of the general revenue of the Empire.”*

Rules regarding the redemption of the demand were issued with Punjab Government notification No. 556, dated 15th July 1862, but were soon after cancelled. For in the same despatch† in which he accepted the principle of a permanent settlement Sir Charles Wood limited the power of redemption ‘at the discretion of the local Government to the case of land required for dwelling-houses, factories, gradens, plantations, and other similar purposes.’ The rules on the subject are contained in Punjab Government notification No. 317, dated 1st March 1869.‡ Little action was taken on these rules, and the power of sanctioning redemption of the land revenue in the cases mentioned above has been withdrawn.§

The purchase of Government waste land free of revenue was permitted by the sale rules of 1863 and 1865.|| But in 1872 the Government of India

*Resolution, dated 17th October 1861.

†No. 14 of 9th July 1862.

‡See Punjab Government Gazette of 11th March and 8th April 1869.

§Government of India, Revenue and Agricultural Department, resolution No. 12-73-17, dated 7th September 1897.

||See Financial Commission's Book Circulars II-A. of 1863 and 21 of 1865.

ordered that, pending a revision of the rules for the disposal of waste lands, no more land should be sold revenue free in perpetuity, excepting only such small plots, not exceeding ten acres in extent, as may be required for building or gardens.* The local Governments power to sell land free of revenue even to this limited extent no longer exists.†

Land of which the revenue has been redeemed or which has been acquired from the State free of revenue is not exempt from the payment of cesses, *chaukidara*, or village expenses (*malba*).

*Government of India, Department of Agriculture, Revenue and Commerce, No. 4-737, dated 10th August 1872.

†Government of India, Revenue and Agricultural Department, resolution No. 12-73-17, dated 7th September 1897. As to land in Municipalities, see correspondence quoted in Appendix XV.

CHAPTER XXIX.—Progressive Assessments and Protective Leases.

495. Object of progressive assessments.—To soften the effect of a large enhancement and mitigate the loss to the State which a long-term settlement may involve, resort has sometimes been had to progressive assessments. By this plan the full amount of the new demand is announced to the land-owners, but the actual collection of part of the increase is deferred for a few years. If a breathing space is given, it should not be too short. The initial demand should hardly be raised till it has been in force for five years, and, if the full revenue is to be reached by two steps, the second may be taken after the lapse of another five years.

496. Progressive assessments of a speculative character dangerous.—Progressive assessments of a speculative character, which seek to secure to the State the benefit of probable extensions of cultivation within the term of settlement, and to promote improvement rather by the fear of loss than the hope of gain, have long been condemned. They are wholly opposed to the principle of the land revenue settlement quoted in paragraph 463, and they are dangerous in practice because they assess assets which may never come into being. If it is likely that a great increase in the cultivated area will soon take place, the term of settlement may properly be made shorter. The case of lands commanded by a Government canal is, as has been noticed in paragraph 447, in some respects, exceptional.

497. Progressive assessments in a depressed tract condemned.—A progressive assessment has sometimes been proposed because a tract is for the present in a depressed state, but it is hoped that it will recover in a few years. If its general circumstances justify the taking of an enhancement, but it is for the time being suffering from some calamity, such as murrain or drought, the better plan is to defer the introduction of the new assessment for a short time, say a year, and meanwhile to remit such portion of the old demand as may seem needful. But if past overassessment, or bad revenue management, or the implacable ill-will of river or swamp, has produced marked deterioration and the demand must be lowered, it is unsafe to assume that recovery will be rapid and a progressive assessment cannot be justified. It is better in such a case, if the tract affected is large, to provide that its assessment may be revised after a comparatively short time, say ten years, although the settlement as a whole is being made for a much longer term. It is convenient, but not essential, that every part of a district should be settled for the same period.

498. Progressive assessments which are permissible.—Progressive or deferred assessments which merely put off for a time the enforcement of part of a demand based on present assets stand on a different footing from those which seek to assess future profits, and their adoption in certain cases has been approved of in a despatch of Her Majesty's Secretary of State (No. 117, dated 24th October 1895, paragraph 7): "It is not intended that any enhancement should be imposed, progressive or otherwise, in consideration of additional income expected to accrue to land-holders during the period of the settlement. A moderate, though sufficient, assessment will be fixed, in accordance with standing rules, on the assets ascertained by the Settlement

Officer. In ordinary cases that assessment will be payable from the beginning of the settlement period. But in some cases it may be held inexpedient to collect from an estate or tract the full enhanced revenue at once, and the increase beyond a certain percentage will be spread over the first ten years of the settlement period in such manner as may be thought fit. I agree that there is no objection to progressive enhancements of this kind."

499. The same.—In communicating these orders the Government of India required that "subject to the conditions and limitations..... laid down" by the Secretary of State "the method of progressive assessments may be used more systematically than has hitherto been the case, wherever it seems inexpedient to impose at once the full enhancement which would result from even a moderate assessment based upon existing assets; and more especially when the term of settlement is thirty years or the revenue-payers are men of substance; the object being not merely to recover a portion of the revenue which it is thought inexpedient to demand at once, but still more to reduce the difficulty of enhancement which may recur at the next revision of settlement..... When the term of settlement is thirty years, this course (of spreading the enhancements over fifteen years) may still be adopted" (Government of India, Revenue and Agricultural Department, Circular No. 27-383, dated 16th December 1895).

500. Latest orders of the Government of India.—The latest orders of the Government of India on the subject are contained in the 33rd and 34th paragraphs of their resolution on land revenue policy dated 16th January 1902—

"There can be no question of the hardship which a family must experience in finding its income suddenly reduced by a third or even more, as may happen, for instance, when at the end of a term of settlement it is enjoying 75 per cent. of the assets, and resettlement is made at 50 per cent. The question in the aspect now under consideration is not really affected (as is sometimes assumed) by the grounds on which the enhancement is made: a heavy addition to the assessment is as disturbing if justified by a large increase of cultivation as if resulting from a rise in valuation rates. It may be argued that a family in such a case has profited largely by the enjoyment of income which it would have lost under a shorter term settlement; that it should have saved from its surplus to meet the eventual curtailment of its means; and that the State will find long-term settlements exceedingly disadvantageous if it is not only to lose all increment during their currency but is also to forego part of its dues at their close. But the question must be considered from a practical point of view, and with reference to the conditions of human nature. The State cannot without hesitation call upon people suddenly to effect a great reduction in their domestic expenditure, however well justified in theory its demand may be. A man will look more to the actual increase of his obligations than he will to the arithmetical standards by which it is justified or determined. If for thirty years he has been paying a land revenue of Rs. 1,000, and is called upon to pay Rs. 2,000 upon resettlement, it is small consolation to him to be told that, while the former sum represented 50 per cent. of his former assets, the latter only amounts to 47 per cent. of his assets as they now stand. A reduction in the percentages is far from compensating him for an enhancement of burdens.

“To meet such cases, the Government of India desire to lay much stress upon the principle of gradual and progressive enforcement of sudden increases of other than moderate dimensions. The mitigation of a large enhancement by spreading its imposition over a term of years has been a recognized feature in the settlement procedure of Upper India for a long time past, but has not till recently been brought systematically into practice. In 1895 the Government of India, with the concurrence of the Secretary of State, drew general attention to the advisability of making larger use of progressive enhancements. In the Punjab the use of progressive assessments has been discouraged on the ground that, though an appropriate means of easing an enhancement to a large land-holder, they are not suitable to the circumstances of the petty proprietors, who hold a very large proportion of the land in that province. Large increases in the demand have been commonly avoided by underassessment. But it seems open to question whether an expedient which has proved serviceable in other parts of India might not be usefully adopted in the Punjab, and the point will be considered, though the effect of progressive assessments in this province would be to raise, not to lower, the Government revenue.”

501. Protective leases on account of improvements.—There is another kind of progressive or deferred assessment as to the grant of which a Settlement Officer has no choice, namely, that prescribed for the protection of certain classes of improvements carried out at the cost of the land-owner. For the ruling power to preclude itself from claiming a larger revenue from the land because its produce has been increased by the expenditure of the capital and labour of the occupiers, is impracticable and opposed to immemorial usage. The State may be likened to an influential sleeping partner who has given to the other partners the right of managing and developing the property, but has not cut himself off from sharing to some extent in the growth of the receipts due directly to their enterprise, but indirectly also to his moderation and power of securing to his associates the peaceable enjoyment of the fruits of their industry. Justice and policy certainly demand that they should be guaranteed a fair profit on their expenditure, but no villager dreams of complaining that his fields are not assessed at their prairie value, or that well lands are rated higher than un-irrigated soils.

502. Orders issued by Court of Directors in 1851.—The position is clearly defined in the 489th paragraph of the despatch (No. 9, dated 13th August 1851), in which the Court of Directors reviewed the first settlements of the districts of the North-Western Provinces under Regulation IX of 1833—

“Another question of importance is whether an agriculturist on the renewal of a settlement should be allowed the full benefit of his improvements, or whether the Government should be held entitled to a share of the additional value, which his capital and industry aided by other circumstances have added to the land. We are of opinion that the only satisfactory principle on which all future renewals of settlement can be made will be that reference must be had to the value of the land at the time, a liberal consideration being given for the improvements attributable only

to the efforts of the tenant himself,* and especially with regard to such as are of a comparatively recent date and with regard to which he has reaped the advantage only for a short period under the old settlement.”†

503. Orders issued by Board of Administration.—Before this despatch was issued a practical step had been taken by the Board of Administration of the Punjab to encourage the construction and repair of wells and the digging of “cuts from rivers and *jhils*,” the kinds of improvements most likely to be undertaken by small farmers. In Circular 41 of 1850 loans for the execution of such works were offered and Commissioners were given authority to grant leases protecting the improvements for certain periods from increased assessment.

504. Provisions of Land Improvement Loans Act.—In section 11 of the Land Improvement Loans Act, XIX of 1883 (as amended by Act VIII of 1906), it is provided that “when land is improved with the aid of a loan granted under this Act, the increase in value derived from the improvement shall not be taken into account in revising the assessment of the land-revenue on the land :

“Provided—

“Where the improvement consists of the reclamation of waste land, or of the irrigation of land assessed at unirrigated rates, the increase may be so taken into account after the expiration of such period as may be fixed by rules to be framed by the Local Government.”

504-A. Principles governing the protection of improvements from assessment to land revenue.—The principle underlying the temporary protection of certain classes of agricultural improvements from any charge on account of land revenue is that the additional net assets derived from land in consequence of such improvements shall not be reduced by any enhancement of land revenue in respect of such assets, or in other words by the assessment of such assets to land revenue, until the capital cost of the improvements, with current interest thereon, has been recouped to the improver out of those additional net assets. The theoretical period of protection depends therefore on—

- (1) the amount of capital expenditure,
- (2) the rate of interest assumed, and
- (3) the average annual value of the additional net assets due to the improvement.

The Punjab Government‡ has accordingly directed that the period of protection for a new irrigation well should be fixed with reference to the above considerations, but subject to a minimum of 20, and a maximum of 40, years, and that it shall depend not on the amount of land revenue to be annually remitted, but on the amount of the additional net assets due to such well. It has further been decided that the total sum inclusive of interest to be recouped from the extra net assets shall be reckoned in all

*The description of the land-owner as “the tenant” so late as 1851 is noteworthy.

†Cp. the XXXVIIth of the Saharanpur Settlement Instructions and the XIIth of the Gorakhpur Settlement Instructions quoted in Appendix I.

‡Punjab Government No. 16166 (Rev. and Agri.—Rev.), dated 31st May 1921, to Senior Secretary to Financial Commissioners, Punjab.

cases at twice the capital cost of the well. This general standard proportion will save a good deal of intricate and uncertain calculation. It may be observed that recoupment of twice the capital in a period of 20 years is equivalent to recoupment of the capital itself in that period together with interest at slightly more than $7\frac{1}{2}$ per cent. per annum on the balance outstanding from year to year. If the period were 40 years, the corresponding rate of interest would be very nearly 4 per cent.

505. Rules for the exemption of land benefited by improvements from enhancement of assessment.—(?) Inasmuch as the average cost of construction of a new well and the average annual additional net assets due to well irrigation over and above that derived from unirrigated cultivation usually varies from tract to tract, it follows that the period of protection calculated on the principles explained in the last paragraph must similarly vary. It will therefore be the duty of the Settlement Officer, as soon as he is in a position to do so, to frame for each assessment circle, in accordance with the above principles, an appropriate period of exemption for the protection from irrigated assessment of new wells to be constructed in the future. The periods proposed should in no case be less than 20 years, or more than 40 years, and each period should be a multiple of five years. The periods framed by the Settlement Officer should be reported with his reasons for the sanction of the Financial Commissioner together with any other matters relative to the protection of future new wells which may require orders.

(ii) The following rules have been framed under section 60 of the Land Revenue Act for carrying out in practice the protection of improvements from assessment :—

(1) When a masonry well is constructed at private expense, or with the aid of a loan from Government, for purposes of irrigation, after the coming into force of these rules, the land which benefits from the well shall be exempted from liability to any such enhanced or additional assessment of land revenue as may be due to the existence of the well, until the expiry of such period as may have been sanctioned at the previous settlement, reckoned from the harvest in which the well is first brought into use. The minimum period of exemption for the purpose of this rule shall be 20 years, but in any case where it is shown that such period is insufficient to repay the land-owner twice the cost of the well out of the additional net assets due to the well, it may be extended to such longer period, not exceeding 40 years, as may be considered sufficient for that purpose. In cases where the Revenue Officer refuses to grant an exemption up to a period of 40 years, the aggrieved party shall have a right of appeal to the Commissioner.

(2) When a well, whether in use or out of use through disrepair, is repaired for the purpose of irrigation, an exemption from liability similar to that in sub-rule (1) may be given for such period (if any) not exceeding half the period specified in that sub-rule as the officer granting the exemption may consider

equitable, with reference to the amount of expenditure incurred on repairing the well and to the principle explained in sub-rule (1).

- (3) When a tube-well is constructed at private expense, or with the aid of a loan from Government, for purposes of irrigation, the land which benefits from the well shall be exempted from liability to any such enhanced or additional assessment of land revenue as may be due to the existence of the well until the expiry of such period as may be considered by the Financial Commissioner to be sufficient to repay the land-owner twice the cost of the well out of the additional net assets due to the existence of the well. The period of exemption shall be such as may be fixed from time to time.
 - (4) During the period of exemption specified in sub-rules (1) to (3) the land revenue assessment of the land irrigated by the well or tube-well shall not exceed the amount which would have been assessed had no new well been constructed or no old well repaired, and in particular no fixed lump assessment shall be imposed on the well during the period of exemption.
 - (5) For irrigation works other than wells or tube-wells, such as dams, reservoirs, water cuts, minor canals or canal distributaries, constructed or repaired at private expense or with the aid of a loan from Government, exemptions similar to those allowed for wells under sub-rules (1) and (2) shall be granted. The period of such exemption shall be determined in each case by the Settlement Officer, but no exemption for a period exceeding 10 years shall be granted without the sanction of the Commissioner, or exceeding 20 years without that of the Financial Commissioner.
 - (6) When a land-owner desires to secure an exemption from assessment on reclaimed waste land in order to compensate him for incurring substantial expenditure on its reclamation, he shall apply, before he commences the work, to the Financial Commissioner for such exemption, giving a description of the land to be reclaimed, the difficulties attending its reclamation, and the sum proposed to be expended on reclamation operations. The Financial Commissioner shall, after making such enquiries as he deems necessary, decide as to whether any exemption shall be given.
- If the Financial Commissioner sanctions an exemption, he shall fix the maximum period of the exemption to be granted. At the close of reclamation operations, the Financial Commissioner, after verification of the actual amount expended on reclamation and the area reclaimed, shall by written order exempt the area reclaimed from assessment of land revenue for a period sufficient to reimburse the land-owner to the extent of twice the sum expended on the reclamation operations, subject to the maximum limit previously fixed.

- (7) When land is reclaimed from waste with the aid of a loan granted by Government, and is thereby brought under cultivation, the increase in value of produce derived from the improvement shall not be taken into account in revising the assessment of land revenue on the land until the expiration of a period of three years, reckoned from the beginning of the harvest first reaped after such reclamation was effected.*
- (8) The periods of exemption specified in the above rules may for sufficient reasons be extended in particular cases with the sanction of the Financial Commissioner.

506. The scope of exemption.—In tracts where, as in some of the western and south-western districts, there is practically no assessment on land in its unirrigated aspect, the whole fixed assessment on well lands lying beyond the reach of river floods or canal water, i.e., *chahi-khalis* lands should be remitted during the period of exemption. In the case of *chahi-sailab* and *chahi-nahri* lands the rates of assessment imposed for the period of exemption shall be as follows :—

- (a) where the land irrigated by the well is situated within reach of river floods, the *sailab* rate or rates, fixed or fluctuating, as the case may be, as sanctioned for the time being ;
- (b) where it is within reach of canal water, the *nahri-khalis* rate or rates fixed or fluctuating, as the case may be, as sanctioned for the time being.

Where in the tracts mentioned above there is no fixed assessment on well-irrigated lands, no rates other than *sailab* or *nahri-khalis* rates as above shall be charged.

507. Grant of exemption certificates at settlement.—When making a revision of assessment, the Settlement Officer should institute an enquiry as to what wells and other irrigation works are entitled to exemption under these rules, whether the owners apply for the exemption or not. This is one of those miscellaneous matters which may conveniently be disposed of early in the settlement. In the course of any visit which he pays to a village the settlement *tahsildar* can ascertain which are the works in respect of which any claim can be set up and make the simple enquiry which such a claim involves. All the cases in an estate should be included in a single file in the form of a register. Any exemptions granted before settlement the terms of which will not expire before the new assessment is introduced should be included in the same statement, which should then be submitted to the Settlement Officer for orders. It will prove embarrassing if final orders as to all such exemptions have not been passed before the distribution of the revenue over holdings is undertaken. The period of protection should end with the agricultural year, the full demand being imposed from the kharif harvest. In every case in which the Settlement Officer grants exemption he should give the land-owner a certificate specifying the well or other work on account of which it is granted, the date of its construction or repair, the term for which the exemption will last, the land

* This rule has been framed under section 11 of the Land Improvement Loans Act, XIX of 1883.

which would otherwise have been assessed at irrigated rates, and the additional demand to be imposed at the end of the period of exemption ; or, if the land is under fluctuating assessment, the certificate should state what the effect of the exemption will be under the system as sanctioned for the tract.

508. Grant of certificates at other times.—When a well, tube-well, or other work is constructed or repaired during the currency of a settlement in such circumstances as to entitle the owner to an exemption from assessment at irrigated rates, the Collector should make a special enquiry and grant a certificate of exemption in accordance with the rules given in paragraph 505. If the exemption is to take effect immediately, for example, when the work is a new well made to irrigate land formerly watered from a well which it has become impossible to repair, or is an existing well repaired, the certificate should state as nearly as may be all the particulars mentioned in paragraph 507, and in addition should show distinctly the amount of existing land revenue to be remitted, fixed, wherever possible, in even rupees. But, if the exemption is not to take effect till the next revision of assessment, as, for instance, where a new well is constructed to irrigate land under fixed assessment not assessed as well irrigated, there is no need to take action unless the owner of the well applies for a certificate. In such a case no entry should be made as to the area subject to the concession or the amount of the exemption. These particulars will be filled in by the Settlement Officer at the next reassessment.

509. Latest statement of policy.—The latest statement of the policy of the Government of India regarding the assessment of land improvements is contained in a resolution of the Department of Revenue and Agriculture, No. 6-193-2, dated 24th May 1906. In the 8th paragraph the opinion is expressed that the Punjab rules “are sufficiently favourable.”

510. Orders of 1852 as to assessment of orchards and plantations.—It will be convenient to notice here the orders relating to the lenient assessment of orchards and plantations. The lack of timber and fruit trees in the Punjab early attracted attention, and among the remedial measures proposed by the Board of Administration and sanctioned by the Government of India was the provision “that at each revision of the settlement the land under copse or planted with young trees shall not be subjected to assessment for the term of that settlement, if at the time of settlement it was not yielding a return, and when at any future settlement it shall be found to be productive, it shall still only be assessed according to the intrinsic qualities of the soil” (Board’s Circular No. 15 of 1852).

511. Rules of 1870 and 1875.—Still more liberal rules were issued in 1870—

“Gardens and groves standing at the time of settlement will be excluded from assessment on condition that, if the trees are cut down, or if they decay and are not immediately replaced by fresh plantations, the land shall at any future period be assessed to the payment of revenue at the village rate for similar land”

“Gardens and groves, in the vicinity of large towns, *sadr* stations and cantonments, and which consequently enjoy the advantage of a good

market for the sale of garden produce, or very extensive and profitable groves elsewhere..... are not to be exempted entirely, but are to be assessed at half village rates" (Financial Commissioner's Book Circular I of 1870).

Further orders on the subject were passed in 1875. They do not apply to the assessment of compounds and gardens in civil stations, which is governed by the rules quoted in Appendix XV—

"During the assessment or reassessment of an estate plantations of timber trees and gardens of fruit trees of slow growth in which ordinary crops are not cultivated may be excluded from the assessable area, or exempted from assessment for a portion of the term of settlement, or assessed at half the rate of assessment for land with similar advantages not under trees, according to circumstances, subject to the condition that, if the land is subsequently brought under ordinary cultivation or cleared of trees, it shall be assessed at full rates. In the case of fruit trees, the term of exemption should be fixed with reference to the time which must elapse before the garden becomes profitable. The land for which such favourable terms are given should not exceed 10 per cent. of the cultivated area of the estate, or, where the shares are held separately, of the share of the estate of which it forms part. Favourable terms need not be given for gardens of fruit trees which come to maturity speedily and yield an early return. But in no case should the rate of assessment for land under timber or fruit trees exceed the village rate for land with similar advantages not under trees" (Financial Commissioner's Book Circular X of 1875). The last provision has been modified to meet the case of gardens from which the owners derive large profits. The existing rule, which was sanctioned in Punjab Government letter No. 201, dated 22nd December 1898, is as follows :—

"The rate of assessment for land under timber or fruit trees should not ordinarily exceed the village rate for land with similar advantages not under trees ; but, when the profits from fruit gardens which have been fully taken into account in the produce estimate greatly exceed the profits from land with similar advantages under *zabti* or other crops, the Settlement Officer should not hesitate to take such gardens out of the general *bachh* and assess them separately."

The condition that ordinary crops are not cultivated need not be taken too literally. When a mango grove is young, a sparse crop of wheat is often grown under it, and the owner of a garden should not be excluded from the benefit of the rules because he sows some fodder in it for the well bullocks.*

512. Rules of 1882 as to timber plantations.—Later regulations allow the total exemption from assessment at any time of land under timber plantations—

- I.—The exemption may be for the whole term of settlement, or for 12 years if the settlement expires before 12 years from the date of exemption.

*See Settlement Commissioner's No. 28, dated 7th October 1882, and Financial Commissioner's No. 8291, dated 31st October 1882.

II.—The trees must be planted, not self-sown.

III.—The plantation must be sufficiently thick to render the land which it covers unfit for cultivation.

If this condition is at any time not fulfilled, the assessment will be reimposed at the rate fixed at settlement for the land.

IV.—With the consent of the Collector, land which has been freed from assessment under these rules may be cleared of trees and replanted without becoming liable to assessment under the previous rule, provided it is at once replanted.

V.—In the case of land assessed to Government revenue which shall hereafter be planted with timber trees no exemption shall be allowed, unless the sanction of the Collector shall have been obtained to the formation of the timber plantation.

VI.—Collectors and Settlement Officers are responsible that not more than 10 per cent. of the cultivated area of any estate, or (when the shares are held separately) of the share of the estate, of which the plantation forms part, is exempted from assessment under the operation of these rules.

VII.—At the expiration of the period of exemption fixed by the Settlement Officer or Collector, or when the exemption becomes resumable owing to non-fulfilment of the conditions on which it was allowed, the Collector will impose the assessment remitted at settlement or after settlement, reporting that he has done so in the manner prescribed for reporting lapses of revenue-free assignments.

VIII.—A *mauzawar* register of such exemptions should be kept up in each district office.

If a Settlement Officer exempts land from assessment under these rules, he treats the land like a revenue-free plot and records in the settlement record the assessment remitted and the amount and conditions of remission. If a Deputy Commissioner proposes to free land from assessment under the rules, he submits an application in a prescribed form.

513. Remissions on account of injury done by roadside trees.—

The extent to which the neighbourhood of trees planted along roads injures the crops sown in the adjoining fields is often very noticeable. Remissions of revenue were first made on this account in the case of Captain Wace's Settlement of Jhelum.

The present rules on the subject* are—

1. Where the land adjoining a public road or canal is appreciably injured by the presence of trees on the side of the road or canal, the Settlement Officer may, at his discretion, classify the land so injured separately,

*Punjab Government letter No. 30, dated 16th February 1901.

and in making the distribution of assessment over holdings treat it as not liable to assessment or charge it at a lower rate than land otherwise of similar quality.

2. The maximum allowance to be made on this account is that up to a limit of 55 feet from the trunks of the trees the whole revenue of all unirrigated land or half the revenue of all irrigated land may be remitted ; but it will be for the Settlement Officer to judge in each case whether so much allowance as this should be made.

3. Should the area injured be sufficiently large to affect appreciably the gross assessment of the estate, the damage caused can be allowed for in fixing the total demand.

4. In the case of land under fluctuating assessment the allowance made for failed crops will usually be sufficient to meet the case.

CHAPTER XXX.—Assessment Reports.

514. Assessment report.—A Settlement Officer must obtain the sanction of Government through the Financial Commissioner to his method of assessment [section 50 (2) of Act XVII of 1887]. He embodies his proposals in an assessment report which he sends to the Commissioner, who forwards it with this own remarks to the Financial Commissioner. It is important that the submission of the report to the Financial Commissioner should not be delayed, and in no case should a Commissioner keep it pending for more than one month, after the expiry of the period allowed in paragraph 514-A for the submission of representations or objections to the assessment proposals as published by the Settlement Officer. Unless the Commissioner has himself conducted a settlement, he is not expected to scrutinize the net assets estimates derived from cash and kind rents, but may confine his attention to general considerations bearing on the pitch of the proposed assessment such as are dealt with in Chapter XXIII.

The Commissioner should arrange with the Settlement Officer, shortly after his settlement is begun, the approximate dates on which he is to have his assessment reports ready, and the dates thus arranged should be intimated to the office of the Financial Commissioner.

The Settlement Officer should send a copy of each assessment report as soon as it is printed to the Deputy Commissioner as well as to the Commissioner of the division. Any remarks which the Deputy Commissioner has to make should be communicated to the Commissioner within one month of the receipt by him of the report.

514-A. Abstract of assessment proposals to be published.—

After the Settlement Officer's report has been prepared, and before it is forwarded to the Commissioner, a brief abstract will be prepared and translated into the vernacular embodying (1) a short explanation of the division of the *tahsil* or other tract under assessment into assessment circles : (2) the main data on which the true net assets estimate is usually based, *viz.*, actual and assumed commutation prices, rates of yield, rates of rent in cash or kind, average total areas cultivated and matured, deductions allowed for expenses of cultivation, menials' dues, etc., the value of land as disclosed by sales and mortgages, the one fourth net assets rates proposed and the theoretical result they would bring out : (3) the general considerations on which the pitch and amount of the total actual assessment proposed to be taken are based, *i.e.*, the increase in resources through irrigation, extension of cultivation, rise in prices, miscellaneous income, etc. : (4) the assessment actually proposed and the actual average revenue rates proposed for adoption in framing village assessments, with such brief explanations as may be necessary, including the clear proviso that there is no guarantee that any particular estate will be ultimately assessed at the exact rates proposed.

Copies of this abstract will be supplied by post to all Zaildars, Sufedposhes, headmen, and organizations of land-owners of the area concerned, to non-official members of the District Board and elected members of the Punjab Legislative Council representing the said area. A period of thirty days from the date of posting will be allowed within which any revenue-payer or group of revenue-payers or occupancy tenants may make a representation or objection to the proposed assessment to the Settlement Officer, who will consider

any such representations or objections and will then forward them, with his views thereon, together with the report, to the Commissioner.

515. Each report should deal with assessment of a *tahsil*.—The assessment proposals for a whole *tahsil* should usually be included in a single report. If a smaller area, such as one assessment circle, is dealt with, the Settlement Officer loses the advantage of comparing circle with circle, and inequality of treatment may ensue. The multiplication of reports is in itself a great evil, considering the number of hands through which each has to pass before final orders are obtained. It is as a rule unwise, on the other hand, to attempt to deal with more than one *tahsil* at a time.

516. Reports should be brief.—It needs some art to make an assessment report full without being lengthy. But the first requisite is not art, but a firm grasp of the assessment problem and of the facts which, in the particular case under discussion, supply the key to unlock it. A man can only expound plainly and briefly matters of which he has a clear understanding. A Settlement Officer will be able to keep his report within a moderate compass if he fixes his eyes on those points which have a definite and important bearing on the assessment, and refuses to turn aside to minor issues or the discussion of general questions of policy. The broader and simpler the arguments advanced in support of the proposed rates, the more likely are they to produce conviction. The main lines of the new assessment throughout the district will often be settled by the orders passed on the first *tahsil* report, and later reports need only refer briefly to some subjects which had to be fully dealt with in the first.

517. Contents of assessment reports.—It is not desirable that any model should be rigidly followed. But at the same time it is an advantage that these reports should be framed on the same general lines and treat the topics with which they deal in the same order. A rough scheme for an assessment report is therefore given in Appendix XVI. The statistical statements should, as far as possible, be confined to those prescribed for the revenue registers, with the addition of a rainfall statement, a net assets estimate based on *batai* and *zabli* rents, and, where cash rents are sufficiently common, a statement of normal rents. In compiling assessment returns from the registers, the information which the latter contain may be condensed to any extent that appears convenient. It is, for example, unnecessary to give details for every year of the expiring settlement separately. Quinquennial or decennial averages are sufficient. The crop statements need only give figures for years whose harvests are made the basis of the produce estimate. But it is useful to supplement this with a statement giving for each year since settlement the sown, failed, and harvested areas without any detail of crops. It will often be found convenient in the body of the report to throw information on some matters into tabular form, and to summarize in this way the leading results of some of the statistics set forth in the general returns. But all such tables should be very short. At least one small scale map showing the chief physical features of the *tahsil* and the former and present assessment circles should accompany the report. Some other matters as, for example, the distribution of agricultural tribes or the water level in different parts of the *tahsil* may, with advantage, be graphically shown in maps. A glossary of vernacular terms used in the report must be supplied.

CHAPTER XXXI.—Distribution of Revenue over Estates and Announcement of new Jamas.

518. Determination of village jamas.—A Settlement Officer need not await orders on his assessment report before distributing the demand over estates. He can make his village assessments on the assumption that his proposed circle rates will be sanctioned, and can complete his remarks in each village notebook by entering the sum at which he has fixed the revenue, and stating at the same time the calculations employed in working it out and the reason by which it is justified. But he must await the orders of Government on his assessment proposals before making any announcement of the new *jamas*. As soon as they are received the Settlement Officer can make any additions or alterations which have become necessary in the notebooks, and can draw up the “order determining the assessment proper for each estate” required by section 51 (1) of the Land Revenue Act of 1887 and Land Revenue rule 29 in Part E of Appendix I.

519. Announcement of village jamas.—When the village *jamas* have been finally settled, they should be imposed within a margin of three per cent. either way of the sanctioned amount for each assessment circle (see Land Revenue rule 20 in part E of Appendix I). When everything is ready, the headmen and other persons interested should be summoned to attend at some convenient place, and informed of the assessments imposed. At the same time the *lambardars* of each estate should be given a memorandum showing what their village will have to pay in future, with any further particulars deemed necessary.* Till the Land Revenue Act of 1887 was passed the headmen signified their acceptance of the assessment by signing or affixing their seals to a tender of engagement (*darkhwaat malguzari*). The old procedure had the merit of marking the fact that the land revenue is not a tax. The harvest from which the new demands will take effect should be stated to the land-owners and noted in the memoranda handed to their headmen. No definite announcement as to the term of the new settlement must be made (paragraph 493).

520. Petitions and appeals against assessment.—Within thirty days after the date on which the new *jamas* are given out, any land-owner, and, in the case of assigned land revenue, the assignee also, may present a petition to the Settlement Officer praying him to reconsider “the amount, form or conditions” of the particular village assessments in which he is interested, and in passing orders the Settlement Officer must record his reasons for granting or refusing the request (section 52 of Act XVII of 1887). Any person affected by the new assessment, whether as land-owner or assignee, may appeal to the Commissioner against the order determining its amount or against a subsequent order rejecting a petition for reconsideration (section 13). The period of limitation in either case is sixty days (section 14).

521. Refusal of land-owners to become liable.—Within ninety days of the announcement of the assessment of his village any land-owner or land-owners, who would be individually or collectively responsible for more than half the *jama*, may give notice to the Settlement Officer of his or their

*See rule 30 in Part E of Appendix I.

refusal to accept liability for its payment (section 55). Fortunately such action on the part of proprietors is now rare. If the Settlement Officer has already rejected a petition for reconsideration, he can only warn the land-owners of the consequences of their recusancy, and, if they persist in it, ask the Collector to take possession of the estate (section 55). It may then be managed direct or made over to a farmer on such conditions as the Financial Commissioner may sanction; the term in either case must not exceed fifteen years, and at the end of it the estate may be reassessed (section 73). While it is under direct management or farmed, the rights of the land-owners are in abeyance, but they are entitled to an allowance of from 5 to 10 per cent., as the Financial Commissioner may determine, of the net income which Government derives from it (section 55).

522. Detailed village assessment statement.—As soon as possible after giving out the *jamas* the Settlement Officer should submit the “detailed village assessment statement” (see Appendix XVII) for the approval of the Commissioner. In every case in which the existing demand is lowered, or in which the assessment of an estate differs by more than 20 per cent. from that brought out by the application of the sanctioned rates, the reason should be explained in the last column. As regards other estates, no remarks are required. It is recognized that a Settlement Officer will usually find it necessary to go freely above and below circle rates in his village assessments. He should, however, submit with the statement a note showing the principles on which he has proceeded in distributing the total assessment of the circle over the different estates, the extent to which he has found it necessary to depart from the circle rates in assessing individual villages, and the manner in which he has treated different parts of the circle. The Commissioner may withhold his sanction to the detailed village assessment statement till he has disposed of any appeals, or till he is satisfied that none are likely to be presented. The Commissioner communicates his sanction to the detailed village assessment statement to the Settlement Officer in a letter in which the amount of the new demand is stated. He at the same time calls for the statements mentioned in Appendix XVIII. These statements are forwarded by the Settlement Officer to the Commissioner who, after checking them in his office with the detailed village assessment statement, forwards them to the Financial Commissioner for record in his office.

523. Special report regarding progressive assessments.—Any action which it is proposed to take in the way of deferring part of the enhancement to a future date should have been fully explained in the assessment report. Progressive assessments which are distinctly covered by the orders passed on it by Government need not be separately reported for sanction. In such cases it is enough to note in the detailed village assessment statement both the initial and the final demand and to show in the remarks column the steps by which the full demand will be reached. Any progressive assessments which do not fall clearly within the scope of the orders received must be specially reported to the Financial Commissioner and their announcement must be deferred till sanction is received. The form to be used is that prescribed for the detailed village assessment statement, and a full explanation of the necessity of the measure must be given in the covering letter.

CHAPTER XXXII.—Distribution of the Revenue over Holdings.

524. Estate assessed, and not holding or field.—According to the land revenue policy of North-Western India the estate, and not the holding or the field, is the unit of assessment, and all its land-owners are ultimately responsible for the payment of the revenue imposed upon it. But each individual proprietor is primarily liable for the quota of the revenue properly chargeable on his own holding (section 61 of the Land Revenue Act of 1887), and the sum at which each holding is rated is shown in the *jamabandi*. In practice the joint responsibility of all the land-owners in an estate or in one of its sub-divisions or *pattis* has very rarely to be enforced.

525. Importance of distribution over holdings.—A good distribution of the demand over holdings (*bachh* or *tafriq*) is of greater importance to the individual land-owners than the amount of the gross assessment of the estate.* According to the theory in favour when our early settlements were made, the former was a matter to be left entirely to the proprietors. It is a significant fact that neither “Thomason’s Directions” nor the Land Revenue Act of 1871 and the rules under it contain a word as to the manner in which the *bachh* should be made. It would be a mistake to infer from this that Settlement Officers paid no attention to the subject, but it is a fact that the matter was left much more in the hands of subordinates than is now thought desirable.

526. Close supervision now required.—The changes of the past fifty years have, to a considerable extent, disintegrated village communities. Freedom of transfer introduced many alien elements, and ancestral or customary shares agree far less than formerly with the facts of possession. The distribution of the revenue according to shares, once so common, has fallen into disrepute. It is impossible in these days to get land-owners to agree to changes of possession which would be necessary in order to make each man’s actual holding agree even roughly with his share. The utmost they are likely to accept is a provision that, if the common lands are divided, the original share which each man held in the estate shall be adopted as the measure of his right in these lands. At the same time the old rough-and-ready rule, where shares were not followed, of spreading the revenue over the cultivated area by means of a single rate without regard to distinctions of soils or classes of land (*sarsari paria*) has ceased to be popular, except in tracts where the conditions of agriculture are exceedingly simple. It was justified on the assumption that each land-owner had a fair share of irrigated and unirrigated land and of each kind of soil. It may be found that it never really was so, but that the more powerful men, who had secured the best lands for themselves, had sufficient influence to obtain the adoption of a method of distribution favourable to their own interests. Even if the original

*See remarks of Mr. Thorburn, Commissioner of Rawaipindi, with reference to the assessment of the *Raya tahsil* in the Revenue Proceedings for January 1894—

“The best Settlement Officer is he who knows his villages best, who assesses on full local knowledge, and who, after assessment, supervises and authoritatively controls the internal *bachh* well by well, and, if necessary, field by field.”

distribution was fair, unjust partitions of the common land or transfers of the better lands to alien purchasers or mortgagees may have made an all-round rate on cultivation grossly unfair. An increased feeling of independence or disunion, whichever we are pleased to call it, may also lead the people to insist on a more detailed system of distribution than was once accepted without demur. The result of these influences has been an increased demand for differential rates on soils or classes of land, and the necessity of much closer supervision and greater interference by the Settlement Officer than was formerly deemed requisite.

527. Provisions of Land Revenue Act and of rules under it.—

Section 56 (1) of the present Land Revenue Act (XVII of 1887) requires the Settlement Officer, before the first instalment of the new assessment becomes due, to issue "an order distributing it over the several holdings comprised in the estate, and make and publish a record of its distribution." This order forms part of the standing record. Rule 23 of the Land Revenue Rules framed under section 60 (b) which bears on this point will be found in Appendix I, Part E. It provides that in deciding the method of the new distribution regard shall be had to the former usage and to the wishes of the land-owners so far as may be practicable and equitable, and prescribe the contents and method of publication of the record referred to in section 56(1). The rule wisely enters into few details. Each officer will adopt the procedure and form of record which he finds most convenient, subject of course in the case of the latter to his giving in it all the information which the rule requires. The following paragraphs are merely intended to give some hints in connection with this branch of work.

528. How far work connected with *bachh* can be undertaken before *jamas* are given out.—The proper time for settling finally the method of the new distribution is after the giving out of the revised *jama*, but a great deal of preparatory work may be done before the announcement of the revenue. The *naib-tahsildar* has already during record work discussed with the land-owners the method of distribution, and at final attestation has prepared the *tarika bachh* file (paragraph 293). Final orders will not be passed on this file till the new assessment is announced and the *zamindars* have had an opportunity of reconsidering their former decision when they know what demand has to be paid, but the Settlement Officer may assume that the proposed method will stand so far as it decides whether the distribution will be by shares or on possession, and so far as it regulates the treatment of joint holdings and mortgagees and cognate subjects. He should therefore proceed to utilize the time which must elapse between the completion of record work and the announcement of the new *jamas* by preparing the detailed holding to holding *bachh* statement. Opposite each revenue-payer's name should be shown (paragraph 544) the area or share according as the proposed *bachh* is on possession or by shares, for the assessment on which the land-owner will be responsible and it will usually be best to record the areas with the details of soil classification shown in the *jamabandi* whether or not the distribution is to be by soils. No form is prescribed for this statement, but columns should be provided for the information required by rule 23 (2) (a) in Part E of Appendix I. The columns showing the demand resulting from the new *bachh* and the cesses will be left blank, and will be filled in after the demand has

been announced. For this final portion of the work also a good deal of preparation can be done. The calculation of the demand on each holding will be much simplified if calendars are got ready beforehand showing how, according to the proposed method of distribution, Rs. 100 or any other selected sum will fall per *bigha* or *biswa*, *ghumao* or *kanal* of each class of soil. If the existing demand is a multiple of Rs. 100 or Rs. 50, the Settlement Officer may go even further, and, if he feels reasonably sure that the method of distribution proposed at final attestation will not be altered when the new demand is announced, he may find it a good plan to work out the effect of it on the existing demand, showing in pencil in the *musl bachh* the effect it would give for each holding. When the new demand is announced, the revenue of each holding can then be altered proportionately and inked in. The Settlement Officer must be prepared to find that in some cases much of this preliminary work will have to be discarded if the *zamindars* on hearing the new demand abandon or alter the method of distribution devised at final attestation. If the Settlement Officer has laid out his work properly, all questions regarding protective leases should have been settled, and all orders on revenue-free holdings either passed by himself, or, where higher sanction was necessary, received from the Financial Commissioner before the *bachh* work is taken in hand.

529. Discussion of *bachh* at time of announcement of new *jamas*.—

The Settlement Officer, when he gives out the new revenue of the village, should inform the land-owners of the former system of distribution and of the system proposed by them at time of final attestation of the records and should discuss with them briefly the propriety of adhering to either of these methods with or without modification or of adopting an entirely new method. He will usually find that little alteration is proposed in the system devised at final attestation if the matter was then carefully enquired into, but, if the land-owners have any hesitation as to the method to be adopted, they should be allowed some time to talk over the matter among themselves. If the Settlement Officer adopts this plan, he must be prepared to spend a fortnight in giving out the *jamas* of a *tahsil*, instead of a single day. At the preliminary discussion the division of the revenue between sub-divisions or *pattis*, if such exist in the estate, should be specially considered. If, for example, each *patti* has hitherto been paying a definite fraction of the revenue, an inspection of the *bachh* record will show pretty clearly whether the distribution by fixed shares can with advantage be maintained. Changes may have occurred through the unequal development of the resources of the different *pattis*, through river action, or through transfers, which make the traditional division of the liability no longer suitable. But it is quite possible that the land-owners may in some cases elect to use somewhat different rates in distributing the revenue of different *pattis*, rather than break up an arrangement of old standing. There may be reasons, of which they are the best judges, which make a division by shares fairer than it appears on the surface. Deficiency of area may be made up for by the possession of better land. Settlement officials are apt to look too much to quantity and too little to quality. In all proceedings connected with the *bachh*, symmetry should without hesitation be sacrificed to convenience or even of prejudice, except where the method of distribution proposed is practically unjust to some of the persons interested.

530. Final determination as to method of distribution.—Cases in which the method of distribution cannot be finally determined when the demand is announced or when the Settlement Officer first discusses the matter with the land-owners will sometimes arise. In these cases the settlement *tahsildar* should be directed to visit the estate or its neighbourhood, after allowing a few days to elapse, in order to discuss the *bachh* with the land-owners and report to the Settlement Officer their wishes and his own proposals. When agreement has been reached, or, in case of dispute, when the settlement *tahsildar* has made up his own mind as to the proper course to follow, it will be well to fill in in pencil against each holding the columns of the record which are intended to show the rate or method of distribution and the new revenue, and to announce the latter holding by holding to the people. Neither they nor the Settlement Officer can really judge of the propriety of what is proposed unless the old and new demand for each holding can be compared. The owners may, with good reason, reject entirely a method of distribution which they at first declared suitable when they see how it works out in practice. If there are disputes, which the settlement *tahsildar* has been unable to compose, he should inform the contending parties of a date on which they may attend before the Settlement Officer, and should note the fact that he has done so on the file. The good working of the assessment may very largely depend on the patience with which the Settlement Officer investigates such disputes and examines the details of the *bachh* record. When his orders have been passed, any necessary changes in the record can be made and the entries can be completed in ink. A paper should then be given to each shareholder showing the old and new revenue and cesses of his holding. It may be expected that after this has been done some fresh disputes will arise, and these in the last resort must be decided by the Settlement Officer.

531. Subsidiary instructions.—In *bachh* rates fractions of pies should never be used. Where rates can conveniently be stated in even annas, this should be done; where this is not feasible, fractions of an anna less than $\frac{1}{4}$ should be avoided as far as possible. Except when land is of great value, one-quarter of a *kanal* or *bigha*, as the case may be, is the lowest area of which account need be taken, where the *ghumaos* or the *zamindari bigha* equal to $\frac{9}{24}$ ths of an acre is the measure of area entered in the land revenue records. Three or four *marlas* or *biswas* may be reckoned as $\frac{1}{4}$ *kanal* and $\frac{1}{4}$ *bigha*, respectively, and 2 *marlas* or *biswas* may be disregarded. Where the *shahjahani bigha*, equal to $\frac{1}{8}$ ths of an acre, is used, it may sometimes be requisite to take account of single *biswas*. It is not necessary that the rates applied to the areas should bring out the new revenue of the estate exactly. A difference of a rupee or two either way will not matter. It may be arranged that the excess shall be credited to, or the deficiency taken from, the *malba*, or the deficiency may be thrown upon some common holding. The total demand from each holding, both revenue and cesses, should be stated in rupees, annas and pice. No coin lower than 1 pice need be recognized.

532. * * * * *

533. Cesses.—Cesses should be distributed in the following way. The whole sum due having been reckoned, it should be ascertained how many pies per rupee of revenue must be levied in order to yield this sum, and the

cesses chargeable to each holding should then be entered without any detail. It is enough to distribute cesses under different heads in the village totals.

534. Order under section 56 (1) of the Land Revenue Act and *bachh* file.—The order required by section 56 (1) of the Land Revenue Act should describe briefly, the former method of distribution, that which has now been adopted, and the reasons which make it suitable. Any objections made and the decisions passed with reference to them may be shortly noticed. The original order should be placed with the standing record, and a copy of it should be the last paper in the *bachh* file. The file should be preserved in the village bundle in the district *kanungo's* office.

535. Petitions for reconsideration of *bachh* and appeals.—Any person affected by the record of the distribution of the revenue over holdings may, within thirty days of its publication, request the Settlement Officer to reconsider it, and in passing orders the latter must give his reasons for granting or rejecting the petition (section 57 of the Land Revenue Act). As a matter of fact, a Settlement Officer should be ready to look into any complaint with reference to the *bachh*, which is not on the face of it unreasonable, at any time before settlement operations are closed. An appeal from an order made under section 57 lies to the Commissioner, and a further appeal from his finding to the Financial Commissioner (section 58).

536. Plots excluded from *bachh*.—Some further remarks may be added on questions which arise in making a distribution of revenue over holdings. There may be some plots such as petty land revenue assignments which have been resumed so far as Government is concerned or fields cultivated by village menials which the proprietors may wish to exclude altogether from the *bachh*. The revenue which these plots would pay spread over the remaining holdings will not add appreciably to the burden which any land-owner has to bear, and, if the feeling in the community in favour of exempting them from assessment is practically unanimous, the opposition of a few objectors may be overruled.

537. Care required in rating of well lands.—The most difficult question for decision in the *bachh* proceedings is usually the rating of wells. There is no matter wherein the views of officials and the wishes of the people are more likely to disagree, and as to which greater deference should be paid to the latter. It is a common experience that the land-owners refused to draw in the *bachh* any such wide distinction between well lands and unirrigated lands as has been made in the sanctioned assessment rates. Daily experience has shown men who till their own fields exactly where the shoe pinches, and they do not look so much, as officials are apt to do, to the rich results of well irrigation without considering sufficiently the expense and risks involved. The great difference in the capacity of wells calls for much care in distribution work. Their value varies with their age and condition, the depth from which water is drawn, the character of the water-bearing stratum, the sweetness or brackishness of the water, the nearness or distance of the well from the village site, the number of the oxen employed upon it, and the quality of the land it irrigates. Such of these causes as affect the extent of land which is watered can be roughly gauged by excerpting from the harvest inspection returns a statement of the average area irrigated by

each well in the past three or four years, and such a statement is of great assistance in making the *bachh*. But the nature of the crops raised must also be considered. In one part of the estate it may be usual to concentrate irrigation on a small acreage of rich crops; in another it may be spread over a large area of ordinary crops. Too much importance should not be attached to the existence of two persian wheels or two buckets. If the shareholders are numerous, this may be more an arrangement for the convenient use of the well than a means of increasing its irrigating capacity. The people should be freely consulted, and they may be invited to classify their wells with or without the aid of arbitrators. In Gujranwala it was found that in large estates with sixty or seventy wells as many as eight or ten classes were wanted, while an instance is quoted of a village with eighty-one wells grouped in twelve classes with rates ranging from Re. 1-1-0 to Rs. 9-9-0 per acre.* A separate assessment of each well may sometimes be preferable to an attempt to divide them into classes.

538. Chief methods of rating well lands.—There are three principal ways of rating wells in the *bachh*—

- (a) By applying irrigated rates to the *chahi* fields. These rates will not necessarily be uniform over the whole village area.
- (b) By rating the land separately and imposing a lump sum in addition as *abiana* or water-advantage revenue.
- (c) By putting a lump sum on the well area.

Under the second plan it is natural to divide the *abiana* among the owners according to their shares in the well. The fact that this cannot be done where the first plan is adopted is a serious disadvantage. It is, in fact, only suitable where the land attached to a well and the well water are owned in approximately equal shares. The second plan is generally the most convenient in itself, but, if its adoption would be an innovation it is well to consider whether it will seriously disturb the former distribution of the revenue between holding and holding. This may be tested by trying its effect in one or two estates. To change the former system of distribution without the consent of the majority of the people is a course which should not be adopted, except on the ground that it is the only way of making an equitable distribution. The Settlement Officer should communicate to the settlement *tahsildar* the amount at which he calculates the *abiana* of the whole estate, and tell him to distribute this sum over the wells in accordance with the average area of crops watered from each as shown in the statement referred to in paragraph 885. The figures thus worked out are only intended to help the land-owners to make a proper distribution, and to enable the settlement officials to defeat any attempt to put an unfair share of the *abiana* on particular wells, those, for example, which are revenue free or owned by occupancy tenants paying at revenue rates with the addition of a *malikana*. The *tahsildar* should be warned that the people may change the total amount of the *abiana* or its distribution over the wells. They may have good reasons for doing the latter. They may, for example, be able to show that a well has been purposely thrown out of gear during settlement, or that another was in a bad state or not fully yoked in some of the years on which the average

*Sir Michael O'Dwyer's Settlement Report of Gujranwala, paragraph 70.

has been struck, but is now efficient ; or, on the other hand, that a well has recently broken down either wholly or partially. It will rarely be wise to put anything like a full *abiana* on disused wells, even though they are capable of being worked. But each case must be judged on its merits. The lands included in well areas may in themselves be of better quality than the purely *barani* lands. When this is the case, it is quite right, if the people wish it, to put a heavier dry rate on the former than on the latter. The third plan does not differ in practice very much from the second. In many parts of the west and south-west of the Punjab a well with the lands attached to it is virtually a separate estate, and there is little or no, *barani* cultivation outside well limits. Where this state of things prevails, the third plan is suitable, and the Settlement Officer may find that he must in fact assess each well separately.

539. Difficulty where persons irrigate from wells in which they have no share.—Puzzling questions arise when it is found that some of the fields regularly watered belong to persons who have no share in the well itself. In Jullundur such fields were, as a rule, assessed in the *bachh* at irrigated rates, though their owner objected, if the irrigation dated from the previous settlement, or if the well-owner got water from another well in which the objector had a share ; otherwise they were treated as dry, especially if the area was small.* In Karnal-Ambala where the *abiana* plan of distribution was adopted, the well-owners were asked whether they agreed to allow the irrigation to continue till the next settlement. If they consented, the *abiana* was shared by all the irrigators, but, if they declined, only such of the irrigators as had a right to the well water were made responsible for its payment.†

540. Differential rating of soils.—When the people ask for a differential rating of soils in the *bachh*, even though separate assessment rates have only been framed for classes of land, their wishes should usually be respected. The settlement *tahsildar* must then go over the area of the estate and make a fresh classification. The work need not, as a rule, take long, as soils usually lie in blocks.

541. Jagirdar's sir lands.—The cultivated lands owned by a *jagirdar* (*sir jagir*) should be treated in the *bachh* as they would be treated if owned by a member of the village brotherhood. If they are of exceptional quality, they may be rated differently from other lands of the same class, but not otherwise.

542. Old and new culturable waste.—Even when no assessment has been imposed by the Settlement Officer on new or old culturable waste, the people may wish to put a portion of the demand upon them. They may even ask that at least such part of the *banjar jadid* and *kadim* as is included in separate proprietary holdings shall be treated exactly like cultivated land. Cases of this sort must be dealt with on their merits. It will often be fair to rate *jadid* like cultivated land and to put a lighter rate on old waste. *Jagirdars* sometimes own blocks of grazing land (*birs*) which are much more valuable than the ordinary pasturage of the village. It is fair

*Mr. Purser's Settlement Report of Jullundur, page 176.

†Karnal-Ambala Settlement Report, paragraph 36.

enough to assess such lands on their merits. But much will depend on the assessment, if any, which they have hitherto borne. Any course should be avoided which might lead assignees to suspect with the smallest show of reason that an attempt was being made to reduce the value of their grants by indirect methods.

543. The common land of the village.—Part of the village common land may be found to be in the separate possession of individual land-owners who cultivate it themselves or through tenants, and part may be tilled by tenants who pay rent to the brotherhood as a whole. It is well to include in the *bachh* all cultivated common land. It must not be assumed that the profits of the common land really are fairly divided among the shareholders, and that each may properly be made liable for the share which he would obtain if a partition took place.

544. Entry of new revenue and cesses in final jamabandi.—The revenue and cesses payable by each shareholder according to the new *bachh* should be entered against his holding in the detailed *jamabandi* which forms part of the standing record. If that is a *jamabandi* drawn up before the announcement of the revised demand, it will already show the revenue and cesses payable for the particular year to which it relates. In that case the new revenue and cesses may be written in red ink below the old. It is a good plan to enter in the *bachh* record and *jamabandi* against each man's holding not only its assessment, but also any sums payable on account of any joint holdings in which he has a share. In this way the whole amount due from each proprietor can be seen at a glance. The sum payable on account of each holding should be noted, and also the total for all holdings. The new demand should not be entered in the *jamabandi* till the period within which objections (paragraph 535) may be made has elapsed and all applications have been disposed of.

545. Revision of settlement bachh.—Section 56 (2) of the Land Revenue Act provides that the Collector may at any time for sufficient reason revise the settlement *bachh*. It is not desirable that a power of this sort should be often exercised, but circumstances may arise when it may usefully be put in force (see, for example, paragraph 498). In the case of progressive enhancements it will not be necessary for the Collector to make a fresh distribution as successive portions of the demand which have been deferred become due. It is the duty of the Settlement Officer in introducing the new assessment to announce and distribute over holdings the demand which will finally be reached, and the five years' reductions should be given by temporarily reducing the demand on each holding by so many annas in the rupee. The Settlement Officer should use this power so as to ensure that after five or ten years each village will be paying approximately its fair share of the total assessment sanctioned for the circle, and he should show on the *bachh* file for each holding the demand due at each enhancement.

CHAPTER XXXIII.—Closing Operations.

546. Incorporation of new assessment in land revenue roll.—When the distribution of the demand over holdings has been finished, it is possible to state exactly the portions of the revenue of each estate due to Government (*khalsa*) and to assignees (*jagir*), respectively, and the amount of the abatements to be made on account of protective leases. The figures in the 10th of the statements in the village notebooks can then be filled in and measures can be taken for the incorporation of the new assessments in the district land revenue roll. The latter operation demands great care if confusion and the possibility of loss are to be avoided. Instructions on the subject will be found in Appendix XVIII.

547. Recovery from jagirdars of cost of assessment.—It has been the rule in the Punjab to require *jagirdars* to contribute to the cost of assessing the estates whose revenue is assigned to them. Accordingly section 148 (1) of the Land Revenue Act of 1887 provides that “when land of which the land revenue has been assigned in whole or in part is reassessed, the assignee shall be liable to pay such a share of the cost of making the reassessment as the Financial Commissioner may determine to be just.” As soon as the new assessments have been distributed over holdings the Settlement Officer should send a statement of the amounts to be recovered to the Commissioner for transmission to the Financial Commissioner. The orders on the subject will be found in Appendix XIX.

548. Custody of standing records.—As the operations in each *tahsil* are finished its standing records should all be deposited in the office of the district *kanungo*. *Patwaris* should have complete copies of these records for the estates in their circles, including a copy of the village map. This latter copy will be on cloth. An exact fair copy of the village map as filed with the standing records will also be kept in the *tahsil*, this copy being made on country mapping sheets. Instructions regarding the above copies are contained in paragraph 20 of Appendix VII.

549. Transfer of correspondence, &c., to district office.—Before the settlement is concluded the correspondence which has occurred in connection with it should be examined, ephemeral papers destroyed, and the rest arranged and handed over to the Deputy Commissioner. It is a good plan to keep all such papers in a separate book case in the district office, together with the printed assessment reports, which, with all the connected correspondence, should be bound together in a single volume. The English village, assessment circle, and *tahsil* revenue registers, the volumes containing the professional survey maps, and the final settlement report can be kept in the same place. At least a year before the close of his operations the Settlement Officer should satisfy himself that there is proper accommodation in the district office for all the records that he will transfer to the custody of the Collector.

549-A. Disposal of equipment on termination of settlement.—As the Director of Land Records is responsible for the redistribution of equipment at the end of a settlement the Settlement Officer should, six months

before the termination of his settlement, send to the Director of Land Records a list of the tents, furniture, survey implements, books, stationery, forms and *musavis* which he anticipates will remain over from his settlement in order to enable the Director of Land Records to arrange for the transfer of the equipment to another settlement. Should, however, the Director of Land Records not be in a position to transfer all the equipment elsewhere at once, the Settlement Officer will when closing the settlement make over to the Deputy Commissioner for custody such of the equipment with him, sending at the same time a list of the equipment to the Director of Land Records.

550. Settlement report.—The final settlement report should, if possible, be written before the Settlement Officer leaves the district. Under existing orders it should ordinarily be sent in print* to the Commissioner within three months of the close of settlement operations, and be in the Financial Commissioner's hands two months later. Elaborate reports of the kind formerly prepared are no longer required. General information regarding a district must now be sought for in its gazetteer, not in the settlement report, which is intended to be "a concise official document devoted almost entirely to the description of the settlement operations and their results." Matters on which orders are still required must be referred for orders separately, and not in the settlement report.

It should generally be possible to arrange its contents under six heads, to each of which a separate chapter may be devoted—

- (a) General description of the district.
- (b) Its past political and fiscal history.
- (c) Progress of the settlement, with special reference to the revision of the record.
- (d) Revision of the assessment.
- (e) Distribution of the revenue over holdings.
- (f) Miscellaneous.

The first two subjects should be disposed of very briefly. It is useless to treat them in anything like the detail which is suitable in a gazetteer or assessment report. Only such information should be given as is indispensable for the understanding of the account of the revised settlement in the succeeding chapters of the report. The chapter on the revision of the assessment should include an abstract of the note submitted with the detailed village assessment statement (paragraph 522) and also a forecast of the probable financial results of the new settlement. In the last chapter all matters not directly connected with the record or the reassessment, which have been discussed and settled in the course of the operations, may be noticed; for example, alluvion and diluvion rules, management of canals or of Government forests, the enquiry into land revenue assignments, the village common fund (*malba*), and the arrangements connected with the offices of *saildar*, headman and *patwari*. Settlement Officers are ordered in their final reports to "prominently draw attention to all points in the revenue administration of the district which require special watchfulness on the part of revenue officers." A report drawn up on these lines need rarely exceed

*The manuscript report should be sent to the Superintendent, Government Printing, Punjab.

From 70 to 80 folio pages of print, exclusive of the statements and appendices. The statements should be few and brief. In fact, a single statement showing by *tahsils* the population, area of land, total and cultivated, the latter being sub-divided into two or three main classes, area of crops and revenue, will usually be sufficient. It is convenient in districts where the assessment is at all complicated to give in one appendix and abstract the methods of assessment sanctioned for different classes of land. In another the special rules, if any, sanctioned at settlement for the assessment of lands affected by river action should be given, in a third the sanctioned scheme for the working of suspensions and remissions (paragraph 554), and in a fourth the principal Government notifications relating to the settlement. Notifications regarding appointments and powers need only be referred to ; those containing instructions or other matters of importance should be reproduced in full. A fifth appendix should give an abstract of the cost of the settlement. The report should be accompanied by a map of the district on a scale of 1 inch = 4 miles if the district does not exceed 2,500 square miles in area ; if the area of the district exceeds 2,500, but does not exceed 4,500 square miles, the scale should be 1 inch = 6 miles ; and, if the district is over 4,500 square miles in area, the scale should then be 1 inch = 8 miles. The map should show the main physical features of the district, its canals, railways and roads and its division into *tahsils* and assessment circles. A glossary of the vernacular terms used in the report should also be given.

550-A. Dastur-ul-amal.—If, owing to the introduction of fluctuating assessments or for other reasons, it is found necessary to supplement the provisions of the Land Revenue Rules and the Standing Orders by local rules for the guidance of *patwaris* and revenue officers in such detail that they cannot conveniently be included in the appendices to the Final Settlement Report, the Settlement Officer should include these rules in a *dastur-ul-amal* (or handbook for the guidance of district revenue officers in carrying out the provisions of the settlement) which should be carefully translated into the vernacular under his own supervision. This *dastur-ul-amal* should be as brief as is consistent with clearness and simplicity of language. The special dates, if any, fixed for crop inspections should be stated in this compendium, and any local rules as to the method of holding crop inspections ; all forms and statements peculiar to the district should be given ; also the rules sanctioned for the district for the grant of protective certificates for new wells, etc., and for the remission of land revenue on wells falling out of use ; and instructions for the working of fluctuating assessments should be given in detail. When the *dastur-ul-amal* has been approved by the Commissioner, after consultation with the Director of Land Records as to the forms to be prescribed for the district, the Commissioner arranges to have the required number of English copies printed, and the Settlement Officer (or the Deputy Commissioner if the Settlement Officer has by that time left the district) arranges for the printing of the vernacular translation.

CHAPTER XXXIV.—Miscellaneous.

551. Miscellaneous tasks imposed on Settlement Officers.—

In this closing chapter will be noticed some tasks of a miscellaneous character which fall to the lot of a Settlement Officer. Most of them are imposed upon him for convenience sake, and not because they have any special connection with the assessment of the land revenue.

552. Revision of district gazetteer.—It is the duty of the Settlement Officer to prepare a new edition of the district gazetteer. The section headed "Land Revenue" should be a clear and succinct *résumé* of the settlement report.

553. Classification of estates as secure and insecure.—A Settlement Officer is required to classify the estates of each *tahsil* as—

- (a) under fluctuating assessment,
- (b) secure, and
- (c) insecure,

and to prepare maps in which these three classes are marked by distinctive colours. Where part only of an estate is under fluctuating assessment, the remainder will be shown under class (b) or class (c). The maps should be drawn on good tracing cloth and should show all names only in English. After approval by the Financial Commissioner four copies are made and sent to the Deputy Commissioner, the Commissioner, the Director of Land Records and the Financial Commissioner. Instructions on the subject will be found in Standing Order No. 30, paragraph 22.

554. Scheme for the working of suspensions.—It is his duty under the same orders to draw up a scheme for the future working of suspensions of land revenue rendered necessary by calamities of season.* Whenever a district comes under settlement in future, it will be the duty of the Settlement Officer to revise, if necessary, the existing maps and scheme.

554-A. Table of average yields.—The Settlement Officer must revise the table of average yields referred to in paragraph 807 of the Land Administration Manual. The data to be used in the compilation of the return will be taken from the assessment reports. The revised statement should be sent to the Director of Land Records, who will submit it for approval to the Commissioner.

555. Orders of Government of India as to revenue instalments.—A Settlement Officer is bound to consider whether the existing arrangements with reference to the collection of the revenue are convenient as regards

- (a) the proportion taken at each harvest,
- (b) the number of instalments in which the demand is realized, and
- (c) the dates on which payment becomes due.

*See Selections from the Records of the Financial Commissioner's Office, New Series, No. 20.

The Government of India in 1882 expressed an opinion that " whenever it is possible, without any serious alteration of existing administrative arrangements, and without any material addition to the difficulties of the revenue staff in the collection of the land revenue, to make any approach towards maintaining a proportion between the harvest outturn and the cash demand, the opportunity should be taken to establish a closer connection between current liabilities and current assets " (Revenue and Agricultural Department Circular No. 15-R., dated 3rd May 1882, paragraph 3), and ordered the matter to be investigated in every district when a suitable occasion occurred (paragraph 11). The arrangement made should be that which is most convenient to the people, and which " by requiring payment when (they) have most cash in hand allows them the amplest facilities for escaping from the money-lender " (paragraph 4). It is by no means essential that the same plans should be followed throughout a *tahsil* or an assessment circle. The circumstances not only of each tract, but of each village, should be considered (paragraph 7). Indeed, it should not be overlooked that a variation in the dates of the instalments has the incidental advantage of insensibly easing the money market, and rendering less likely a rise in the rate of interest and a fall in the price of grain such as results from the simultaneous withdrawal of a large amount of silver from circulation (paragraph 8).*

556. Apportionment of demand between harvests and number of instalments.—Where an equal division of the demand between the *kharif* and *rabi* is not suitable, some simple fractions, such as one-third and two-thirds, should be adopted. Formerly the custom was almost, if not quite, universal of arranging for the payment of the revenue of each harvest in two instalments separated by at least one month the one from the other.† In some parts of the country it was found that in practice the people usually brought the whole revenue of each harvest to the *tahsil* at one time, and the tendency of late has been to consolidate the separate payment, at least in the case of the spring harvest. In considering the question, it must be remembered that this involves a large demand for money at one time, which may, as observed above, possibly make it dear. In the *kharif* two instalments are often indispensable, especially where sugarcane is largely grown.

557. Dates of instalments.—The dates fixed for payment in each case should be late enough to give the owners full opportunity in an ordinary year of disposing of enough of their grain to pay the revenue with its proceeds by the time it falls due, but not so late as to offer any temptation to them to squander the fruits of the harvest or hand them all over to the village money-lender. Crops can be roughly divided into those which a farmer keeps or would like to keep for the food of his family and his cattle, and those which he grows for sale. It is the time at which the latter are garnered that must be chiefly considered.

*A Settlement Officer, however, will be wise not to assume without enquiry that, as regards any particular district, the temporary withdrawal from circulation of the amount of money necessary for the payment of the revenue will have these effects (See Mr. Wilson's Settlement Report of Shahpur, paragraph 102).

†See Board of Administration Circular No. 45, dated 24th December 1851.

558. Land-owners to be consulted.—The best occasion for discussing the question of instalments with the people is the time when the method of distributing the new assessment over holdings is being determined. It is a matter in which they are inclined to be intensely conservative, and a patient endeavour should be made to find out what they really fear in connection with any suggested change. They may know that, with reference to the actual conditions under which the money is raised for payment into the treasury, it is easier to get an equal amount at different seasons than unequal amounts, which seem much better adapted to the actual outturn of the two harvests. In all matters connected with instalments great weight should be given to their wishes, but occasions may occur when a mere dislike to change makes them blind to their own advantage, and when therefore their objections may properly be overruled.

559. Report of proposed changes in instalments.—By section 63 (1) of the Land Revenue Act the Financial Commissioner is given power to fix the number, amount, and dates of instalments. The proposals of the Settlement Officer should not be included in the assessment reports, but should be made in a separate report for the whole district. The matter should be discussed beforehand with the Deputy Commissioner, and he should be asked to write a note to be sent with the report to the Commissioner. In particular, the question whether one instalment should be fixed, instead of two, for the collection of the land revenue demand of each harvest should be considered.

560. Record of customs in administration papers of early settlements.—In the despatch dated 31st March 1849, by which the Board of Administration was constituted, Lord Dalhousie clearly laid down the policy of upholding "native institutions and practices as far as they are consistent with the distribution of justice to all classes," of maintaining village communities in all their integrity, and of improving and consolidating "popular institutions." The pursuit of this object involved a careful study of the customs existing among the rural population in respect of inheritance, pre-emption, and the like, which differed widely from the prescriptions of Hindu and Muhammadan law, and our early Settlement Officers, following the example of their predecessors in the North-Western Provinces, embodied in the village administration papers of early settlements a statement of the usages followed in such matters.

561. Introduction of tribal and local records of customs by Mr. Prinsep.—In 1864 Mr. Prinsep, as Settlement Commissioner, started the plan of preparing records of tribal custom* and the measure received the sanction of the Punjab Government. The Government of India, in expressing its approval of the scheme, ordered the records to be limited to "actually recognized and established customs."† Mr. Prinsep also requested his Settlement Officers to draw up *tahsil* records embodying the

*See his Settlement Paper No. 31, quoted on page 68 of the 1st Volume of Tupper's "Punjab Customary Law."

†Government of India No. 20, dated 20th January 1866—see page 88 of "Punjab Customary Law," Volume I.

lex loci on certain important matters connected with agriculture, such, for example, as the planting and cutting of trees and the rights and privileges of new cultivators.* His object was twofold, to lighten the settlement record by setting forth once and for all for tribes or tracts customs which had hitherto been entered in the record for each estate, and to collect information which would be of use to the courts in the administration of justice.

562. The Punjab Civil Code.—The Punjab Civil Code, drafted by Sir Richard Temple under the instructions of Sir John Lawrence, and circulated for the guidance of judicial officers in 1854, embodied a good deal of local custom, and recognized the propriety of civil courts being guided by it in their decisions as well as by the precepts of the Hindu and Muhammadan law books.† It was at first accepted for practical purposes as substantive law, and, when doubt was thrown on its title to this position, all defects were cured by a provision introduced into the Indian Councils Act of 1861 confirming all laws, orders and regulations hitherto made for the government of the non-regulation provinces.

With the passing of the Punjab Laws Act of 1872, the Punjab Civil Code ceased to have any binding force. But that Act at the same time declared that "in questions regarding inheritance, special property of females, betrothal, marriage, dower, adoption, guardianship, minority, bastardy, family relations, wills, legacies, gifts, partitions, or any religious usage or institution, the (primary) rule of decision" should be "any custom of any body or class of persons, which is not contrary to justice, equity and good conscience and has not been declared to be void by any competent authority"‡ (section 5, see also section 7).

563. Rules under the Land Revenue Act of 1871.—The gap created by the changed position of the Punjab Civil Code led to increased attention being paid to the compilation of records of tribal custom at time of settlement. In 1872 the Financial Commissioner issued a circular on the subject, and the rules under the Land Revenue Act of 1871 provided that, where the customs regulating particular relations were common to the whole of a tribe or to a group of villages, they might be collected into tribal or *ilakawar* statements.§ The record was to be one of usages actually existing, and precedents were to be cited where possible. "Nothing," it was noted, "can be called a custom which is not acted on, or which is not of the nature of a rule habitually applied by the persons amongst whom the custom is said to prevail whenever the occasion arises, and . . . no determination of the headmen of the tribe or group of villages to adopt new rules not founded upon existing custom would be of any force, as they have no power to bind the members of the communities to which they respectively belong."||

*Settlement Paper No. 36, quoted on page 88 of the same volume, where the number is erroneously given as 39.

†See section III of the Code quoted on page 61 of the 1st Volume of "Punjab Customary Law."

‡This section was amended by Act XII of 1878.

§Rules under the Land Revenue Act of 1871, C—V, 34.

||Rules under the Land Revenue Act of 1871, C—V, 36.

564. Sir Lewis Tupper's scheme for systematizing the enquiry.—

In 1878 Sir Lewis Tupper submitted proposals for "giving a still greater degree of system and precision to the executive investigation of customary law." The final result was the drawing up of two sets of questions, one dealing with tribal customs, regulating the domestic relationships, inheritance, *et cetera*, and the other with local agrarian customs. The sketch given in the foregoing paragraphs may be supplemented by reference to the first volume of Sir Lewis Tupper's work on Punjab Customary Law, and especially to its introductory chapter.

565. The *riwaj-i-am*.—In any district in which no *riwaj-i-am* or record of tribal custom has been prepared it is the duty of the Settlement Officer to have one drawn up. It is only necessary to make such records for the principal tribes in each *tahsil*. The Settlement Officer should choose the tribes and draw up the list of questions. He will probably find that he can simplify a few of those in Sir Lewis Tupper's list, and omit a good many of them altogether. But his questions should be arranged in the same order as in Sir Lewis Tupper's volume. The actual enquiry may be made by the settlement *tahsildars* or the Extra Assistant Settlement Officer, who should assemble the leading men, including all the village headmen of each tribe, at a convenient centre, explain the questions to them, and record their answers. He should be particularly careful to ask for precedents, as regards customs which are likely to be disputed in the law courts, as, for example, where a tribe or a part of a tribe assert a usage whereby the primary division of the land in the case of an owner leaving male children by two wives is into two equal shares, one for the offspring of each (*chundavand*), as opposed to the usual custom of division among all sons *per capita* (*pagvand*). The Settlement Officer should scrutinize the answers, marking any which seem to him to be founded on a misunderstanding of the meaning of the questions, or vague, or probably incorrect. He should himself call together the leading tribesmen in each *tahsil* and examine them again as to such doubtful points. The faired vernacular *riwaj-i-am* may conveniently contain separate columns for the questions, the answers, precedents quoted and the Settlement Officer's notes. Wherever it appears to a Settlement Officer that any answer embodies rather a vague popular sentiment, or a feeling of what ought to be, than what is actually, customary, he should not fail to note the fact.* The faired vernacular *riwaj-i-am* should be kept in the district office. Copies should be supplied to the offices of the Senior Sub-Judge, the District Judge and the High Court.

Where a *riwaj-i-am* has been drawn up at a former settlement, a report must be furnished through the Commissioner to the Financial Commissioner of the nature of its contents, and its completeness and trustworthiness as a record of tribal custom, and instructions must be solicited.

In recent settlements English abstracts of the *riwaj-i-am* have been prepared by the Settlement Officers. These are published as volumes supplementary to Mr. Tupper's work on "Punjab Customary Law."

*Paragraph 5 of Financial Commissioner's No. 2195-S., dated 2nd April 1879, quoted on page 214 of Tupper's "Punjab Customary Law," Volume 1.

566. Entries in *riwaj-i-am* have no legal presumption of truth.—

No presumption of truth, such as attaches to entries in the village administration papers under section 44 of the Land Revenue Act of 1887, belongs to the contents of a *riwaj-i-am*. But if the record of tribal custom has evidently been prepared after careful enquiry, and especially if the answers are fortified by the quotation of precedents, courts of justice may be expected to treat the replies recorded as valuable evidence.

567. Local record of agrarian usages.—Where agrarian customs, as regards particular matters of importance, are uniform throughout a considerable tract of group or villages, they may often be conveniently embodied in general statements of local usages. For example, a record of the customary rules regulating the distribution of the water of a hill stream may be very useful.* A short entry in the administration paper of each estate as regards matters dealt with at length in the general record may be made, "only the more salient and fixed points of custom" being noted.† Sir James Lyall, when Financial Commissioner, held that the power of incorporating the contents of a *riwaj-i-am* by mere reference in the village administration paper should be used very sparingly, if at all, as it was "dangerous and likely to lead to inaccurate generalizations."‡

568. Enquiry regarding land revenue assignments.—It is the duty of the Settlement Officer to examine and attest all existing assignments of land revenue. This work should be taken in hand at an early period of settlement operations, though not before the Settlement Officer has acquired a good general knowledge of the circumstances of the different parts of his district. It is well to begin by finding out what was actually done in the matter at the previous settlements and by tracing the former correspondence and registers, to which the Settlement Officer will have to refer in passing orders. The enquiry must be made, in the first instance, by the settlement *tahsildars*, who should be furnished with full instructions as to the procedure to be adopted, and especially as to the kinds of cases which may be collected in village lists and those in which the preparation of separate files is necessary. They should also be made acquainted with the policy that will be adopted in dealing with assignments. Delay in these cases is likely to breed confusion and trouble. It must be remembered that the tracing of the authority for the release of a particular grant is sometimes a difficult matter, and that, till he has disposed of all the cases in a *tahsil*, the Settlement Officer is not in a position to prepare the registers of those as to which the orders of his official superiors are required. He must not forget that a considerable time may elapse between the submission of the registers and the receipt of orders, and that it will be embarrassing if the period for distributing the revenue over holdings in any *tahsil* arrives before they have been obtained. It is therefore essential to take up promptly the cases of the *tahsil* which will be first assessed.

569. Treatment of different descriptions of grants.—Occasionally a few holdings may be found of which the revenue is enjoyed by private individuals without proper authority. In such cases resumption must be

*See sections 39 and 45 of the Punjab Minor Canals Act, III of 1905.

†Financial Commissioner's No. 6-S.C., dated 28th May 1879, paragraph 2, quoted on page 217 of Tupper's "Punjab Customary Law."

‡Financial Commissioner's No. 6-S.C., dated 28th May 1879.

ordered with the concurrence of the Collector (see paragraph 186 of the Land Administration Manual) or sanction solicited. Where an assignment has been released in perpetuity, or during the maintenance of the institution or during the pleasure of Government, a general enquiry is requisite as to whether the conditions of the grant are fulfilled. Where they have been wilfully and persistently broken, resumption should be recommended. Grants for life call for no action unless it is considered proper that they should be continued after the deaths of existing holders. Assignments for the term of settlement should usually be proposed for continuance, except when they are of a purely personal character. The conditions on which such grants are renewed should be so framed as to make it easy for Government to withdraw its favour at any time from the existing incumbent in case of proved abuse or neglect of duty, without at the same time cancelling the grant to the institution, if proper arrangements for its future management can be made by the village community or other body which is interested in its maintenance. Thus the assignment should be to the institution in the name of the manager for the time being, and it should be made conditional on loyalty, good conduct, and the proper maintenance of the institution.*

570. Small grants for village service.—Grants for the term of settlement made for village service or in favour of village institutions, which do not exceed Rs. 20 in annual value, may either be resumed and assessed in the ordinary way, or they may be struck off the Government list, but the land left unassessed for one period of settlement to see whether the *zamindars* will agree to continue the *masi* as a grant from themselves by excluding it from the *bachh*. As an estate is assessed as a whole without discriminating between *khalsa* and revenue-free lands, the only feasible way of doing this is first to make the assessment in the ordinary way and then to make a suitable reduction with reference to the area of the grants so treated. When the revenue is distributed over holdings, the people should be informed that for the coming settlement Government has foregone the demand which might have been assessed on these resumed assignments, and asked whether they will exclude the land from the *bachh* (paragraph 536). The area of such grants is often extremely insignificant. When they are treated in this way, trouble is saved to revenue officials, and, what is more important, the assignments are restored to their original position as grants made by the village communities and under their control. If the people refuse to exclude these plots from the *bachh*, it becomes clear that the assessment is their work, and not ours. It is sometimes expedient to propose that life *masis* of this description should, on the deaths of existing holders before the next settlement, be converted into grants for the term of settlement, so that, when the time for reassessment arrives, they too may be put on a proper footing.†

571. Assignments in jagir estates.—For the treatment of assignments in *jagir* estates reference may be made to Standing Order No. 7 and to the 99th paragraph of the Karnal-Ambala Settlement Report, where certain orders issued by the late Colonel Wace, when Financial Commissioner, are quoted. These orders relate primarily to the *cis-Sutlej jagirs*, but the principle on which they are based would probably be held to be also applicable to old *jagirs* in the Punjab proper.

*See, also paragraphs 186—192 of the Land Administration Manual.

†See, as to village *masis*, paragraphs 193—196 of the Land Administration Manual.

572. Report of cases requiring orders.—The cases which require the orders of some higher authority should be brought together in English registers, where they should be classified under proper heads. All the cases for one *tahsil* should be sent up together. Separate registers should be prepared for—

- (a) grants whose resumption is proposed for breach of conditions ;
- (b) grants whose continuance is proposed, as to which the orders of the Financial Commissioner are sufficient ;
- (c) grants whose continuance is proposed, as to which the orders of the local Government are required.

573. Preparation of new mafi registers.—*Cancelled.*

For the prescribed registers see the rules in Part J, paragraph 59, of Standing Order No. 7—Assignments, etc.

574. Reference to Standing Order No. 7.—In the foregoing paragraphs a bare outline of the duties of a Settlement Officer in connection with land revenue assignments has been given. For the considerations which ought to guide him in deciding whether a grant should be resumed or proposed for continuance, for information as to the authority which has been at different times, in the past, and is now, sufficient for the upholding of *mafis* of various descriptions, and as to the forms of registers, grant of *sanads*, *et cetera*, Settlement Officers must refer to the 3rd Chapter of the Land Administration Manual and to Standing Order No. 7.

575. A liberal policy expedient.—It may be said generally that the policy of Government is to treat with liberality all cases in which assignments are connected with religious or charitable institutions, or in consideration of which any definite service is performed, or which are held by members of old families which still enjoy a large measure of local esteem. Too much stress should not be laid on the trouble involved in the maintenance of petty grants. The people often attach more importance to them than their intrinsic value would seem to justify, and it is extremely impolitic to do anything that may arouse a suspicion that in these small matters the State is inclined to be less generous now than in earlier days.

576. Patwari and kanungo establishments.—All questions connected with the number of *patwaris* and *kanungos* and the limits of their circles should be dealt with by the Settlement Officer in communication with the Deputy Commissioner. Changes in the number, grading and pay of the *patwari* establishment require the sanction of the Financial Commissioners.* An increase in the *kanungo* establishment requires the sanction of Government.† All proposals as to such changes or increases should be submitted by the Commissioner to the Financial Commissioner through the Director of Land Records.

577. Scheme for gradual reduction of number of village headmen.—The excessive number of headmen in some districts is an evil which has long been recognized. But at the same time reductions made in a

* Land Administration Manual, paragraphs 278—280.

† Land Administration Manual, paragraph 293.

capricious or haphazard manner on the occurrence of vacancies are sure to cause heartburnings and dissensions. For this reason it has been provided that schemes for gradual reduction may be prepared during the progress of settlement operations or in special circumstances at other times by the Deputy Commissioner. The orders on the subject will be found in paragraphs 830-831 of the Land Administration Manual.

578. Preliminary report as to appointment of zaildars and inamdars.—The office of *zaildar* can only be established in any local area with the previous sanction of the local Government (Land Revenue Rule 1). Hence the introduction of the *zaildari* agency into any district must be approved by the local Government. Any subsequent increase or decrease in the number of *zaildars* can be made under the orders of the Financial Commissioner (Land Revenue Rule 2), provided the percentage of the land revenue assigned for their emoluments is not exceeded. If the appointment of *zaildars* has not already been considered and negatived, a Settlement Officer, as soon as he feels that he has a sufficient acquaintance with the circumstances of his district, should draw up a preliminary report on the whole subject. In it he should explain why no such agency has yet been appointed, and submit rough proposals for its organization. No attempt should be made to fix the limits of *zails*, but the tribal organization and other important features of the tract should be explained in such detail as is necessary to enable Government to judge whether the agency should be introduced. Any proposals to appoint *inamdars* may be made in the same report. The opinions both of the Settlement Officer and of the Deputy Commissioner should be given. The report should be submitted to Government through the Commissioner and the Financial Commissioner, each of whom should record his views on the proposal made in it.

579. Constitution of zails.—If the local Government approves of the introduction of the *zaildari* agency, the Settlement Officer should, in consultation with the Deputy Commissioner, divide each *tahsil* into *zails*. In doing this, care should be taken to include in one circle, as far as possible, people of one tribe or villages which have some connection or affinity, so that discordant elements may be excluded as far as possible. It is not practicable to lay down any standard size for a *zail*. Usually it is made up of from four to eight *patwari* circles. It may be convenient sometimes to have larger *zails*; but the question of size is of less importance than the consideration whether the *zails* are so arranged, as, on the one hand, to give a convenient representation of the leading tribes of the tract, and, on the other hand, not to give a *zaildar* more work or responsibility than he can successfully perform or bear. In cases in which a small strong tribe inhabits a compact cluster of villages, such villages may be formed into a separate *zail*, even though the result should be a *zail* of specially small size. It is desirable that a *zail* should not be divided between two *thanas* or a *thana* between two *zails*, and that a *patwari*'s circle should all be included in a single *zail*. The latter, however, is of much less importance than the former. But, while the boundaries of *zails* and *thanas* should ordinarily not overlap, it is well freely to allow exceptions to this rule, rather than to break the ties of old tribal or historical connections or of common interests.

580. Zail books.—The *zails* having been arranged, a separate *zail* book should be prepared for each *tahsil*; at the beginning of each book a small

map of the *tahsil* should be given, showing village boundaries, limits of *patwari* circles, main tribes (by colours) and proposed *zails*. The book should be divided into as many sections as there are *zails*. Each section should begin with the necessary title followed by a map of the *zail*, showing the same features as the map last described, but on a larger scale. To this should be added a statistical table in the form given in Standing Order No. 21. Thereafter sufficient blank space must be left for the memoranda required by the same order. Separate blank pages must also be included for the entry of notes as to the *zaildar's* conduct or any other matters connected with the *zail* which the Deputy Commissioner thinks fit from time to time to record.

581. Report to the Financial Commissioner.—The *zail* books, with a brief report on the nature of the arrangements made, must be sent to the Commissioner, whose sanction to the limits proposed for each *zail* is required [Land Revenue Rule 1(ii)]. It should also be reported for the orders of the Financial Commissioner how it is proposed to pay the *zaildar*, whether by giving to each man 1 per cent. of the revenue of his own *zail* or by a system of graded *inam*,* amounting in the aggregate to a deduction of 1 per cent. from the revenue of the whole district.

582. Appointment of *zaildars*.—Having received the orders of the Financial Commissioner, the Settlement Officer and the Deputy Commissioner should together make the first appointments of *zaildars* and *inamdars* in the manner prescribed by the rules under the Land Revenue Act. For further information regarding the appointment, remuneration, and duties &c., of *zaildars* and *inamdars*, the rules under the Land Revenue Act (1 to 13) and paragraphs 336—347 of the Land Administration Manual may be consulted.

*See paragraph 4 of Standing Order No. 21.

APPENDIX 1.

Assessment Instructions issued from time to time.

A.—EXTRACT FROM INSTRUCTIONS FOR THE REVISION OF THE SETTLEMENT OF THE SAHARANPUR DISTRICT ISSUED IN 1855.

XXXIV.—The adjustment of the Government demand is not a matter of arithmetical calculation, nor can precise rules be laid down to guide the Collector, who must in a great measure follow his own judgment and his own methods for acquiring information With this view (equalization of the assessments) statements should at once be drawn up for each *pargana*, showing for each *manza* in it the cultivated, culturable, lakhiraj, barren, and total area, jama and rate per acre of the jama on the total malguzari and cultivated areas as recorded at the settlement and as at present existing.

XXXV.—The attention of the Collector will thus be at once drawn to any villages in which the cultivation has materially increased since the settlement or the rates are unusually low, or in which, on the other hand, from whatever cause, a falling-off in the extent of the cultivation is perceptible, or the rates are much above the average.

XXXVI.—The assets of an estate can seldom be minutely ascertained, but more certain information as to the average net assets can be obtained now than was formerly the case. This may lead to over-assessment, for there is little doubt that two-thirds, or 66 per cent., is a larger proportion of the real average assets than can ordinarily be paid by proprietors or communities in a long course of years. For this reason the Government have determined so far to modify the rule laid down in paragraph 52 of the "Directions to Settlement Officers" as to limit the demand of the State to 50 per cent., or one-half of the average net assets. By this it is not meant that the *jama* of each estate is to be fixed at one-half of the net average assets, but that in taking these assets with other data into consideration the Collector will bear in mind that about one-half, and not two-thirds as heretofore, of the well-ascertained net assets should be the Government demand. The Collector should observe the cautions given in paragraph 47 to 51 of the treatise quoted, and not waste time in minute and probably fruitless attempts to ascertain exactly the average net assets of the estates under settlement.

XXXVII.—In villages the cultivation of which has been much extended since the settlement by the breaking up of new land, or the percentage of irrigation increased by the sinking of new wells or other improvements, the expenditure of capital must be allowed (if for) and a moderate *jama* assessed.

XXXVIII.—Besides the settlement of the Government demand separate engagements should be taken for the payment in addition of 1 per cent. on the Government demand for the Road Fund, for an equal amount for the School Fund, and for $\frac{1}{4}$ or 4 *annas* per cent. for the District *Dak*.

NOTE.—Rule XLII provided that these three cesses and the pay of the village *chaukidars* should be "assumed as payable from the net assets before the determination of the Government demand". In a village with a rental of Rs. 1,000 and one *chaukidar* paid at the rate of Rs. 3 monthly the account stood—

					Rs. A. P.
Revenue .. .. .	..	..	..	..	476 6 0
Road, School and <i>Dak</i> cesses .. .. .	..	..	..	..	11 4 0
<i>Chaukidars</i> .. .. .	..	..	..	..	36 0 0

**EXTRACT FROM INSTRUCTIONS FOR THE RE-SETTLEMENT OF THE GORAKH-
PUR DISTRICT ISSUED IN 1856.**

XII.—The assessment should be determined upon the general principles inculcated in the Saharanpur rules, due advertence being had as well to prospective capabilities as to present assets, and also to any expenditure of capital by a proprietor for which he may not have had the means of obtaining a fully remunerative return.

B.—ASSESSMENT INSTRUCTIONS ISSUED IN 1878.

The following instructions under section 9 of the first Punjab Land Revenue Act (XXXIII of 1871) issued in 1878 to the Settlement Officers of Delhi, Karnal and Gurgaon were also adopted in the case of the other settlements made under that Act :—

- (i) The general principle of assessment to be followed is that the Government demand for land-revenue shall not exceed the estimated value of half the net produce of an estate, or in other words one-half of the share of the produce of an estate ordinarily receivable by the landlord either in money or in kind.
- (ii) In applying this principle in the case of the portion of the district where produce rents prevail, special attention should be given by the Settlement Officers to produce estimates.
- (iii) In estimating the land-revenue demand the Settlement Officer will take into consideration all circumstances directly or indirectly bearing upon the assessment, such as rent rates where money rates exist, the habits and character of the people, the proximity of marts for the disposal of produce, facilities of communication, the incidence of past assessment, the existence of profits from grazing, and the like. These and other considerations must be allowed their weight.
- (iv) The gross assessments for each assessment circle having been framed by the Settlement Officer on the principle above indicated, revenue rates on soils may be deduced therefrom, and the proposed gross assessment, together with the proposed revenue rates, must be reported to the Financial Commissioner for preliminary sanction, and will, when sanctioned by the Financial Commissioner, form the basis of assessment of particular estate in the circle ; but in the assessment to be ultimately adopted full consideration must be given to the special circumstances of each estate.

The principle laid down in Rule 1 is to be observed in the assessment in each case.

C.—ASSESSMENT INSTRUCTIONS ISSUED IN 1889.

The instructions given below were issued to Settlement Officers in 1888, but never received the final approval of the Government of India, and have been superseded by the instructions which are now in force :—

- (i) The general principle of assessment to be followed is that the Government demand for land-revenue shall not exceed the estimated value of half the net produce of an estate.

(ii) In assessing the estates contained in a tract under assessment the method of the primary estimate of the land-revenue assessable on each estate and upon the tract as a whole shall be as follows:—

The tract under assessment shall be divided into as many circles as may be required by broad existing differences of fertility, (propriety), or tenure, and there shall then be framed for each circle as many revenue rates as may be necessary to distinguish the main classes into which land is locally divided in respect to soil and system of agriculture, irrigation or want of irrigation, so far as such distinctions are clearly apparent in marked differences of value of net produce, or are clearly recognised in prevailing rent rates. These circle revenue rates shall be so framed as to represent approximately the estimated average annual half net produce of an acre of each such class of land in the circle.

(iii) In estimating the net produce of cultivated lands of any class, whether occupied by landowners themselves or by tenants, the rents paid in money or in kind on an average of years by ordinary tenants-at-will for such lands in the assessment circle to which the estate belongs shall be the principle guide.

(iv) But when by the custom of any tract certain expenses fall on the land-owner, which can properly be set against the rents above referred to (as, for example, the cost of wells, or of clearance of canal channels, losses on advances to tenants, &c.), full allowance will be made for such expenses, and in the case of lands the rents or net produce of which have been increased by wells or other works of improvement constructed at private expense, care should be taken not to tax unfairly the capital invested in the improvement, and to altogether remit for the period allowed by the special rules on the subject, any part of the assessment which may be due to the increase of rent or net produce caused by such improvement.

(v) In assessing land irrigated by State canals the Settlement Officer, unless otherwise directed by the Local Government, will assess such lands as nearly as may be at the same rates as land of similar quality and advantages in the same tract or district which is not irrigated by canals, leaving the advantage derived by the land-owner from canal irrigation to be realized by canal-owner's rates.

(vi) When revenue rates on classes of land for each circle and estimated gross assessments for the same have been framed by the Settlement Officer on the principles above indicated, they will be reported to the Financial Commissioner for preliminary sanction. But in the assessment to be finally adopted full consideration must be given to the special circumstances of each estate.

(vii) For example, in finally assessing each particular estate the assessing officer shall take into consideration, in addition to the estimate obtained from the revenue rates, all circumstances directly or indirectly bearing upon the profits and rents of the landowners, especially such circumstances as the following:—

- (a) Rents actually existing in the estate, or, if these are not ascertainable, in neighbouring estates where the conditions are similar, if such rents appear to be higher or lower than the average rent rates of the circle.*
- (b) All profits derived from the land, whether cultivated or uncultivated.
- (c) The husbandry and average produce of the estate.
- (d) The habits and character of the landowners and tenants.

- (e) Proximity of markets, and facilities of communication and for disposal of produce.
- (f) Incidence and working of previous assessment.

And, so far as is justified by these circumstances, the assessing officer is authorised in the assessment of each estate to depart from the revenue rates of the circle.

D.—ASSESSMENT INSTRUCTIONS SANCTIONED IN 1893 AND REVISED IN 1914.

Preliminary.

1. Under the provisions of section 49 of the Punjab Land Revenue Act, 1887, the general re-assessment of a district or tahsil cannot be undertaken without the sanction of the Local Government.

2. Before granting such sanction the Local Government should receive a forecast of the expected financial results of the re-assessment. The forecast will show by tahsils the revenue rates upon which the expiring assessment was based; the actual amount of the existing land revenue, the increase expected to result from the proposed re-assessment and the general grounds on which the estimate of the increase is based.

3. In cases in which the ultimate new revenue anticipated from a district (or similar area settled in one operation) differs from the existing revenue by more than 33 per cent., the Local Government, before issuing instructions for undertaking a re-assessment, should obtain the orders of the Government of India.

If, during the course of the operations or on their completion, it be found that the percentage of enhancement exceeds the figures previously sanctioned by the Government of India, the proposals shall again be submitted for their sanction before the new assessment is announced or confirmed.

If, on the assumption that the enhancement would not exceed 33 per cent., the inception of re-assessment operations has been sanctioned by the Local Government under rule I, and if, during the course of the operations or on their completion, it be found that the enhancement will exceed 33 per cent., the proposals should be submitted for the sanction of the Government of India before the new assessment is announced or confirmed.

General Principles.

4. The fundamental principle of land revenue assessment is that according to the ancient custom of the country, Government is entitled to a share of the produce of the land from time to time to be fixed by itself. The exact share to be taken is a question to be settled separately for each tract and estate under assessment according to the circumstances of the case.

5. Unless the Local Government has, under section 48 (2) of the Land Revenue Act, 1887, otherwise directed, or unless a fluctuating system of assessment has been ordered by the Local Government, the Government share of the produce must be assessed in cash at a fixed amount for each estate for a term of years.

6. The net 'assets' of an estate mean the average surplus which the estate may yield after deduction of the expenses of cultivation. A full fair rent paid by a tenant-at-will, though sometimes falling short of the net-assets, may generally, in practice and for purposes of assessment, be taken as a sufficiently near approximation to them on the land for which it is paid. When, therefore, the entire land of a tract is let to such tenants paying such a rent, the 'net-assets' of the tract can be easily calculated, if the tenants pay rent in cash. If the rents

are produce rents fixed in quantity, the calculation becomes more difficult on account of inevitable variations in price over a term of years. If the rents are produce rents fixed as a share of the crop, the difficulty becomes greater still, as both character, quantity and price will vary. In most districts of the Punjab difficulties of this latter kind are met with, and an additional difficulty lies in the fact that a large proportion of the cultivated land is not let to tenants, but cultivated by the petty proprietors themselves. The calculation then becomes not only difficult but hypothetical, and the results of greater uncertainty and less value.

7. The assessment of an estate will be fixed according to circumstances, but must not exceed half the value of the net-assets.

8. The tract under re-assessment will be divided into assessment circles in accordance with the detailed instructions in chapter XVI of the Settlement Manual. When submitting an assessment report for a tahsil or other area the assessing officer will state, for each circle, the value of the half net-assets as calculated by him and also the amount of the re-assessment which he proposes for adoption in practice and the detailed rates by which he proposes to distribute it over the different classes of land. He will explain how the half net-assets have been calculated, and his reasons for the actual re-assessment and rates which he proposes to adopt. He will give this information in such form and with such additional particulars as the Settlement Manual prescribes.

9. Before conveying sanction under section 50 (2) of the Land Revenue Act to the assessment proposed by the assessing officer, the Financial Commissioner shall submit the Settlement Officer's report, with the Commissioner's review, and the orders which he proposes to pass thereupon, for the approval of the Local Government. The assessing officer is expected to realise the amount fixed by orders passed on the assessment report for the circle within a margin of 8 per cent. either way. If he thinks greater deviation desirable he must refer the matter for further orders before announcing his re-assessment. In the assessment of particular estates the assessing officer is allowed to assess above or below rates at his discretion subject to the detailed instructions in chapters XIX and XX of the Settlement Manual.

10. Copies of important orders with connected papers regarding the settlement of any area, not less than a tahsil, should be forwarded to the Government of India without a covering letter as soon as the orders are available in print, and a similar practice should be observed if important alterations are at any time carried out in the general instructions for assessment.

E.—Rules regarding assessment of Land Revenue framed in 1929 under Section 60 of the Punjab Land Revenue Act.

The Punjab Land Revenue Act was amended in 1928. It reduced the standard of assessment from one-half to one-fourth of the net assets and extended the term of future settlements in fully developed tracts to forty years. It also provided for the making of rules to codify the main processes adopted in calculating the share of the produce to be taken as land revenue. The following rules were accordingly framed and passed by the Punjab Legislative Council. They now take the place, of the executive instructions given in part D of this appendix :—

LAND REVENUE ASSESSMENT RULES, 1929.

(a) The method by which the estimate of the money value of the net assets of an estate or group of estates shall be made.

1. (3) ~~An estimate of net assets as defined in clause (18) of section 8 of the Punjab Land Revenue Act, 1887 (hereinafter referred to as the Act), shall be framed on the basis of rents in kind paid by tenants-at-will prevailing in the estate or group of estates under consideration.~~

Estimate of net assets based on rents in kind.

(2) The accurate calculation of this estimate depends on four factors,—
Factors involved.

- (a) the average acreage of each crop on each class of land for which it is proposed to frame separate rates;
- (b) the average yield per acre of each crop so grown for which rent is taken by division of produce;
- (c) the average price obtainable by agriculturists for each of the crops referred to under clause (b) ; and
- (d) the actual share of the gross produce received by land owners in the case of crops which are divided and the rent payable on zabti crops.

From the first three of these factors an estimate shall be made of the value of the annual gross produce of the estate or group of estates in question.

From that estimate and the fourth factor an estimate shall be made of the annual value of the landowners' share of that produce or net assets.

Classes of land.

2. (1) The most important classes of cultivated land are as follows :—

- (a) barani : dependent on rainfall ;
- (b) sailab : flooded or kept permanently moist by rivers ;
- (c) abi : watered by lift from tanks, johls, streams, or by flow from springs ;
- (d) nahri : irrigated by canals by flow or lift ;
- ✓ (e) chahi : watered from wells.

(2) The most important classes of uncultivated land are as follows :—

- ✓ (a) banjar jadid : land which has remained unsown for four successive harvests ;
- ✓ (b) banjar qadim : land which has remained unsown for eight successive harvests ; and
- (c) ghair mumkin : land which has for any reason become unculturable such as land under roads, buildings, streams, canals, tanks, or the like, or land which is barren sand, or ravines.

8. The acreage to be used in the estimate shall be the average matured area of the selected years. These years will be the cycle or period of years of which the harvests are a fair sample of the ordinary fluctuations characteristic of

Average acreage.

the agriculture of the tract.

4. The prices to be adopted in the estimate shall be the average prices which are likely to be obtained for their crops by agriculturists during the coming settlement, but shall be based on the average of a sufficiently long period.

Prices to be adopted.

in the past, and it shall be assumed that the range of future prices will not be dissimilar. The prices prevailing in years of famine or severe scarcity shall be excluded from the calculation.

The prices adopted for each crop shall be based on the prices current in the month in which the agriculturists of the tract ordinarily dispose of their produce. If in any estate or group of estates it is found that most of the agriculturists take their produce to market towns and dispose of it there, allowance shall be made for the cost of cartage to markets and for any fees paid at markets to agents, weighmen, etc., and for any customary deductions such as 'watta' as actually prevail.

NOTE.—In determining the prices to be adopted the Revenue Officer shall, among other data available to him, scrutinize the following :—

- (a) shop-keepers' books in selected villages ;
- (b) harvest prices for each assessment circle reported by the field kanungo for entry in the circle note-books ;
- (c) harvest prices published in the Gazette ;
- (d) prices obtaining in markets ; and
- (e) prices obtained by estates under the Court of Wards and by large proprietors for their produce.

5. In estimating the average yields of each crop on the different classes of land in an estate or group of estates the Revenue Officer shall be guided by the results of—

Average yields.

- ✓(a) experimental cuttings ;
- (b) his own observations ;
- (c) information gathered from trustworthy persons ;
- (d) accounts of landowners where obtainable, e.g., accounts of estates under the Court of Wards and of farms maintained by the Department of Agriculture ; and
- ✓ (e) yields assumed for similar tracts elsewhere.

6. In estimating the actual share received by landowners of the gross produce, calculated in accordance with the preceding rules, the value of any portions of that produce paid, before it is divided, to artizans or menials for help in tillage or harvesting or for the supply and repair of agricultural implements, or for any other work subsidiary to agriculture, and any expenses of collection of rent paid out of the common heap, shall be deducted.

Menials' dues and expenses of collection.

From the balance the value of the share retainable by the tenants, on the assumption made in the concluding portion of clause (18) of section 8 of the Act, shall be deducted. The value of the remainder shall be the estimate of net assets, after adjustment in accordance with the instructions contained in rule 7.

Tenants share.

7. (a) In the absence of a contract to the contrary, land revenue is payable by landowners, and water rates by tenants. In cases where tenants pay a certain proportion of the land revenue, or landowners of the water rates, a corresponding addition to, or deduction from, the estimate shall be made.

Adjustments to be made.

(b) Where means of irrigation and embankments are maintained by a tenant at his own expense, no deduction shall be made from the estimate on this account. If, however, any part of the cost of such maintenance is borne by the landowner, a corresponding deduction shall be made from it.

(c) Where the cost of all or any part of the seed or manure used on the land is borne by a landowner, and is not counterbalanced by either the receipt by him of a larger share of the produce, or a smaller allowance of fodder to the tenant than is customary, or the like, a corresponding deduction shall be made from the estimate. 1

(d) Where a landowner provides, at his own cost, improved agricultural implements for the use of his tenants, and makes no charge for the use thereof, whether in the way of a larger share of the produce, or otherwise, a corresponding deduction shall be made from the estimate.

(e) Concessions with regard to fodder ordinarily take one of the following forms :—

- (i) a specified area per pair of bullocks or some similar unit of area is devoted by a tenant to the raising of fodder crops of which the landowner receives no share ;
- (ii) a tenant is permitted to cut certain crops green for fodder and the landowner receives nothing on account thereof ;
- (iii) the landowner takes either no share of fodder or only a share of the grain of certain crops.

In any of these cases, or in any other case in which a landowner permits the use for fodder by his tenants of crops grown on his land, and takes either no share thereof, or a share smaller than of the grain a corresponding deduction shall be made from the estimate.

(f) Where a landowner employs paid agency at his own expense to collect his share of produce, a corresponding deduction on account of the cost of that agency shall be made from the estimate.

(g) Where a landowner advances monies free of interest to his tenants for agricultural purposes, a deduction on account of the interest due on such advances shall be made from the estimate.

The rate of interest to be allowed in making such deduction shall be not lower than that allowed by the local Central Co-operative Bank on deposits made with it, or higher than that charged by the same bank on loans advanced by it.

8. A second estimate of net assets shall also be framed on the basis of cash rents payable by tenants-at-will prevailing in the estate or group of estates under consideration on the assumption made in the concluding portion of clause (18) of section 3 of the Act. This estimate shall only be framed where the following factors are present :—

- (a) the existence in any circle of a system of cash rents on a sufficiently large scale to enable them to be used as a guide in estimating the renting value of the remainder of the land of the circle ;
- (b) the recognition in the Revenue Records of such distinctions of soil and class as are usually accompanied by marked differences of renting value.

9. All rents which are not true economic rents and are not based on the prevailing rent-rate or the average rate actually paid on any class of land shall be excluded by the Revenue Officer from his calculations as abnormal. Thus the following rents shall be considered abnormal :—

- (a) rents consisting of the land revenue with or without a small additional payment as proprietary fee unless the land-revenue is high and the land poor ;
- (b) privileged rents paid by relations, friends, dependents or persons discharging religious duties ;
- (c) rents unduly inflated by jealousy or special local or personal conditions of a transitory character, rents so exorbitant as to be no index of the real letting value of land, and rents in which other factors such as mortgage money enter.

The Revenue Officer shall scrutinize cash rents carefully in each village as it comes under inspection. He shall satisfy himself that they have been correctly recorded, and shall then decide what rents shall be eliminated as abnormal.

10. The Revenue Officer shall, from the rents remaining after elimination of abnormal rents, frame an estimate of landowners' net assets subject to the following instructions :—

- (i) the provisions of rules 7 (a), (b), (c), (d), (e), (f) and (g) shall, *mutatis mutandis*, apply ;
- (ii) ~~deduction shall be made, if necessary, for fallows or bad harvests.~~
The amount of the deduction to be made in each case depends on the result of the local enquiries made by the Revenue Officer ;
- (iii) deduction shall be made for shortage in collection of rent, where such shortage is not due to bad management.

11. Should the landowners, whether they take rents in cash or in kind, also enjoy as such any income or dues from land which have not been taken into account in the estimates framed under the preceding rules, the amount of such income or dues shall be added to the net assets.

12. The final estimates of net assets based on (a) rents in kind ; and (b) cash rent calculated in accordance with the preceding rules shall be compared, and the Revenue Officer shall then arrive at a definite estimate of what are the true net assets of each estate or group of estates.

(b) The method by which assessment to land revenue shall be made.

13. Before the re-assessment of any area is undertaken a forecast report shall be submitted of the expected financial results of the re-assessment, showing whether for financial reasons or otherwise re-assessment is desirable. In the report specific mention shall, *inter alia*, be made of the following matters :—

- (a) the existing assessment, the suitability of its form to local circumstances, and the fairness of its distribution over estates ;
- (b) changes in cultivation, population, means of irrigation, and markets and communications ;
- (c) rainfall ;

(d) prices ;

(e) any factors affecting the general prosperity of the tract, as an increase in water-logging.

Before the report is prepared, the leading agriculturists and organizations of land-owners of the area concerned shall be consulted, so far as practicable, and it shall be noted in the report to what extent this has been done and what opinions have been elicited.

14. The area under re-assessment shall be divided into assessment circles as defined in clause (19) of section 8 of the Act.

Assessment circles.

15. (1) The Revenue Officer shall frame his proposals with respect to classes of soils, selected years, prices to be adopted and assessment circles in accordance with the provisions of rules 2, 3, 4 and 14, respectively, as soon as possible after the commencement of settlement operations.

(2) The Revenue Officer shall have an abstract of his proposals prepared and translated into vernacular. Printed copies of this abstract shall be supplied by post to all zaildars, sufedposhes, headmen, and organizations of land-owners of the area concerned and to non-official members of the District Board, and elected members of the Punjab Legislative Council representing the said area. A period of thirty days from the date of posting shall be allowed within which they may file objections on all or any of the matters referred to in sub-rule (1) to the Revenue Officer.

(3) The Revenue Officer shall take such objections into consideration and forward them with his views thereon together with his proposals through the Commissioner for the orders of the Financial Commissioner.

16. Before preparing the report prescribed by sub-section (2) of section 50 of the Act the Revenue Officer shall make a special inspection of each estate, and record an inspection note thereon.

Special inspection of each estate.

17. The Revenue Officer shall, having taken into consideration the existing assessment, the true net assets arrived at under rule 12 and all other relevant factors, make his proposals as to the future assessment of each assessment circle.

Assessment proposals.

18. In the report submitted under sub-section (2) of section 50 of the Act the Revenue Officer shall, *inter alia*, state clearly for each assessment circle—

Particulars to be stated.

- (a) the value of the true net assets as calculated by him,
- (b) the re-assessment which he proposes, and
- (c) the detailed rates by which he proposes to distribute it over different classes of land or crops.

19. (1) After the preparation of his report, but before it is forwarded to the Commissioner, the Revenue Officer shall have a brief abstract prepared and translated into vernacular, containing—

Abstract of assessment report to be published.

- [(a) the principal data on which the true net assets estimate has been based, viz., rates of yield assumed, rates of rent in cash or in kind, average total areas cultivated and matured deductions allowed for expenses of cultivation, menials, dues, etc., and the value of land as disclosed by sales and mortgages ;

(b) the general considerations on which the pitch and amount of the total actual assessment proposed to be taken are based, i.e., the increase in resources through irrigation, extension of cultivation; ✓ rise in prices, miscellaneous income, etc. ;

(c) the total assessment and the average revenue rates proposed for adoption in framing village assessments, with such brief explanations as may be necessary, including the clear proviso that there is no guarantee that any particular estate will be ultimately assessed at the exact rates proposed.

(2) Copies of this abstract shall be supplied by post to all zaildars, sufedposhes, headmen, and organizations of landowners of the area concerned, and to non-official members of the District Board, and elected members of the Punjab Legislative Council representing the said area.

A period of thirty days from the date of posting shall be allowed within which any revenue payer or group of revenue payers or occupancy tenants may make a representation or objection to the proposed assessment to the Revenue Officer.

Any such representations or objections shall be considered by the Revenue Officer, who shall forward them with his views thereon together with the report to the Commissioner.

20. The assessment ordered by Government for each assessment circle Deviation allowed. ✓ shall be imposed within a margin of three per cent. either way.

21. Subject to the provisions of sub-section 3 of section 51 of the Act, the Assessment of particular estates.. assessment of each estate shall be fixed according to circumstances.

22. Large enhancements of land revenue on particular estates, shall, if necessary, be mitigated by the imposition of the revised demand in a progressive form, i.e., a portion of Progressive assessments. the increased demand shall be deferred for a period of years.

23. (1) Before making or revising the distribution of a fixed assessment over the several holdings of an estate, the Revenue Officer shall enquire into the usage followed in the previous Distribution of assessment ever holdings. distribution, and, in deciding the method of the new distribution, he shall have regard to that usage and to the wishes of the landowners, so far as may be practicable and equitable.

(2) (a) The Revenue Officer shall then make an order setting forth the method of the former distribution, and the method by which the new distribution is to be made, and shall direct that a record of the new distribution be prepared showing—

✓(1) serial number of holding ;

✓(2) landowner (with description) liable for the land revenue on each holding ;

(3) area of holding, with such details as are necessary for the purposes of the distribution ;

(4) rate or measure by which the new distribution is made ;

(5) amount charged to each holding by former distribution ;

(6) rates and cesses charged by a percentage on the land revenue payable by each holding by the former distribution ;

✓(7) amount charged to each holding by the new distribution ;

(8) rates and cesses charged by a percentage on the land revenue payable by each holding by the new distribution.

(b) Where the rent of a tenancy is the whole or a share of the land revenue thereof, with or without an addition in money, kind, or service, or where an occupancy tenant pays his rent by a cash rent on a recognised measure of area, or by a cash rent in gross on his tenancy, the tenancy and the result of proceedings (if any) taken under section 27 of the Punjab Tenancy Act, 1887, shall be shown in this record under the landowner's holding of which the tenancy is part an additional entry showing the tenant's name being inserted between entries (2) and (3).

(c) Where there are superior and inferior landowners in the same estate, both classes of landowners shall be shown in the record under entry (2); and there shall be added after entry (8) any malikana due to the superior landowner which is charged by a percentage on the land revenue; or, if part of the land revenue is payable to the superior landowner, details showing the amount so due to the superior landowner shall be shown under entry (7).

(8) The record thus made shall be published by delivering a copy thereof to the headman of the estate, and by posting another copy at a conspicuous place in or near the estate. A copy shall also be supplied to the patwari.

4. If the assessment is in the form of rates chargeable according to the results of each year or harvest, the Assistant Collector, to whom the Revenue Officer may assign this business by order under section 12 of the Act, shall cause a record of the sum chargeable to each holding to be prepared for each year or harvest (as the case may be) giving the particulars (entries (5) and (6) excepted) set out in sub-rule (2), and shall publish it in the manner prescribed in sub-rule (3).

(c) The principles on which exemption from assessment shall be allowed for improvements.

24. (1) When a masonry well is constructed at private expense or with the aid of a loan from Government, for purposes of irrigation, after the coming into force of these rules, the land which benefits from the well shall be exempted from liability to any such enhanced or additional assessment of land revenue as may be due to the existence of the well, until the expiry of such period as may have been sanctioned at the previous settlement, reckoned from the harvest in which the well is first brought into use. The minimum period of exemption for the purpose of this rule shall be 20 years, but in any case where it is shown that such period is insufficient to repay the landowner twice the cost of the well out of the additional net assets due to the well, it may be extended to such longer period, not exceeding 40 years, as may be considered sufficient for that purpose. In cases where the Revenue Officer refuses to grant an exemption up to a period of 40 years, the aggrieved party shall have a right of appeal to the Commissioner.

(2) When a well, whether in use or out of use through disrepair, is repaired for the purpose of irrigation, an exemption from liability similar to that in sub-rule (1) may be given for such period (if any) not exceeding half the period specified in that sub-rule as the officer granting the exemption may consider equitable, with reference to the amount of expenditure incurred on repairing the well and to the principle explained in sub-rule (1).

(3) When a tube-well is constructed at private expense or with the aid of a loan from Government for purposes of irrigation, the land which benefits from the well shall be exempted from liability to any such enhanced or additional assessment of land revenue as may be due to the existence of the well until the expiry of such period as may be considered by the Financial Commissioner

to be sufficient to repay the landowner twice the cost of the well out of the additional net assets due to the existence of the well. The minimum period of exemption for the purpose of this rule shall be twenty years for wells constructed within the five years immediately following the date on which these rules are finally confirmed. But after the expiry of five years the determination of such minimum period, if any, shall be re-considered in the light of the experience gained during them.

(4) During the period of exemption specified in sub-rules (1) to (3) the land revenue assessment of the land irrigated by the well or tube-well shall not exceed the amount which would have been assessed had no new well been constructed or no old well repaired, and in particular no fixed lump assessment shall be imposed on the well during the period of exemption.

(5) In tracts where there is practically no assessment on land in its unirrigated aspect the whole fixed assessment on well lands lying beyond the reach of river floods or canal water, i.e., chahi-khalis lands, shall be remitted during the period of exemption. In the case of chahi-sailab and chahi-nahri lands the rates of assessment imposed for the period of exemption shall be as follows :—

- (a) where the land irrigated by the well is situated within reach of river floods, the sailab rate or rates, fixed or fluctuating as the case may be, as sanctioned for the time being ;
- (b) where it is within reach of canal water, the nahri-khalis rate or rates, fixed or fluctuating as the case may be, as sanctioned for the time being.

Where in the tracts mentioned above there is no fixed assessment on well irrigated lands, no rates other than sailab or nahri-khalis rates as above shall be charged.

(6) For irrigation works other than wells or tube-wells, such as dams, reservoirs, water cuts, minor canals, or canal distributaries, constructed or repaired at private expense or with the aid of a loan from Government, exemptions similar to those allowed for wells under sub-rules (1) and (2) shall be granted. The period of such exemptions shall be determined in each case by the Revenue Officer, but no exemption for a period exceeding 10 years shall be granted without the sanction of the Commissioner, or exceeding 20 years without that of the Financial Commissioner.

(7) The periods of exemption specified in the foregoing sub-rules may, for sufficient reasons, be extended with the sanction of the Financial Commissioner.

24-A. (1) So much of the assessment on the land irrigated from a masonry or tube well as is based on the profits of irrigation shall be remitted—

- (a) when the well ceases to be fit for use ;
- (b) when irrigation from it is superseded by canal irrigation and canal-advantage revenue or owner's rate has been imposed.

NOTE.—The revenue based on the profits of irrigation from the well shall ordinarily be assumed to be as follows :—

- (i) where a lump sum has been imposed at the distribution of assessment on the well in addition to a non-well rate : such lump sum ;
- (ii) where a lump sum, inclusive of a non-well rate, has been imposed at the distribution of assessment : such lump sum after deducting the equivalent of non-well rate ;
- (iii) where the distribution of the assessment has been by soil rates the difference between the actual assessment of the area irrigated and the amount which would have been assessed on that area if it had not been irrigated.

(2) A similar remission may be granted if the well, though still fit for use, has been out of use for four harvests, provided that no remission shall be given if the disuse of the well—

(a) occurs in the ordinary course of husbandry, the well being intended for use merely in seasons of drought ;

(b) is due to the introduction of canal irrigation and canal-advantage revenue or owner's rate has not been imposed.

25. When settlement operations are in progress the Revenue Officer shall obtain through the Commissioner the sanction of the Financial Commissioner with respect to the period of exemption for wells other than tube wells, for each assessment circle.

Period of exemption for wells to be fixed at settlement.

26. In every case in which the Revenue Officer grants exemption he shall give the landowner a certificate specifying the well or other work on account of which it is granted, the date of its construction or repair, the term for which the exemption will last, the land which would otherwise have been assessed at irrigated rates, and the additional demand to be imposed at the end of the period of exemption. If the land is under fluctuating assessment, the certificate shall further state what the exemption will be under the system as sanctioned for the tract.

Grant of exemption certificates at settlement.

27. When a well, tube-well, or other work is constructed or repaired during the currency of a settlement in such circumstances as to entitle the owner to an exemption from assessment at irrigated rates, the Revenue Officer shall make a special enquiry and grant a certificate of exemption in accordance with the provisions of rule 24. If the exemption is to take effect immediately, the certificate shall state as nearly as may be all the particulars mentioned in rule 26, and in addition shall show distinctly the amount of existing land revenue to be remitted. But if the exemption is not to take effect till the next revision of assessment, no action need be taken unless the owner of the work in question applies for a certificate. In such a case no entry shall be made as to the area subject to the concession or the amount of the exemption.

28. When a landowner desires to secure an exemption from assessment on reclaimed waste land in order to compensate him for incurring substantial expenditure on its reclamation, he shall apply, before he commences the work, to the Financial Commissioner for such exemption, giving a description of the land to be reclaimed, the difficulties attending its reclamation, and the sum proposed to be expended on reclamation operations. The Financial Commissioner shall, after making such enquiries as he deems necessary, decide as to whether any exemption shall be given.

If the Financial Commissioner sanctions an exemption, he shall fix the maximum period of the exemption to be granted. At the close of reclamation operations, the Financial Commissioner, after verification of the actual amount expended on reclamation and the area reclaimed, shall by written order exempt the area reclaimed from assessment of land revenue for a period sufficient to reimburse the landowner to the extent of twice the sum expended on the reclamation operations, subject to the maximum limit previously fixed.

(d) The manner in which assessment shall be announced.

29. The Revenue Officer shall, on receipt of the orders of Government on his assessment proposals, draw up an order determining the assessment proper on each estate.

Order of assessment for each estate.

30. (1) For the purpose of announcing the assessment imposed on each estate a notice shall be issued summoning the headmen and other persons interested to attend at a place and on a date specified. On such date and at such place the Revenue Officer shall announce the assessment.

(2) The headmen of each estate shall be given a memorandum showing the future assessment of the estate, and any additional particulars deemed necessary.

(3) The harvest from which the new demand shall take effect shall be announced to the headmen and other persons interested, and shall be noted in the memorandum furnished to the headmen.

(e) The manner in which the rate of incidence of the land revenue is to be calculated for the purpose of sub-section (3) of section 51.

31. (a) In assessment circles in which fixed assessment was imposed at the last previous assessment, the rate of incidence of such assessment shall be the rate obtained by dividing the total assessment on cultivated land, as finally imposed by the Revenue Officer who made the assessment, by the cultivated area as ascertained by him for the purpose of assessment.

(b) In assessment circles in which fluctuating assessment was imposed at the last previous assessment, the average acreage of crops forming the basis of the net assets estimate at such assessment shall be multiplied by the final rates sanctioned. The figures thus arrived at shall be divided by the cultivated area as ascertained, for the purpose of assessment, by the Revenue Officer who imposed the assessment, and the result shall be the rate of incidence of the last previous assessment.

(c) In assessment circles in which the assessment imposed at the last previous assessment was partly fixed and partly fluctuating, the average acreage of crops forming, either partly or wholly, the basis of the net assets estimate of such assessment that are subject to fluctuating assessment shall be multiplied by the final rates sanctioned for fluctuating assessment. To the figure thus arrived at shall be added the final fixed demand imposed by the Revenue Officer, and the total shall be divided by the cultivated area as ascertained for the purpose of assessment by the Revenue Officer. The result shall be the rate of incidence of the last previous assessment.

(d) The rate of incidence on the cultivated area for the purpose of the revised assessment shall be determined, *mutatis mutandis*, by such of the methods in clauses (a), (b) and (c) of this rule as are applicable to the circumstances of the circles under assessment applied to the cultivated area determined by the Revenue Officer at re-assessment.

APPENDIX II.

(SETTLEMENT MANUAL, PARAGRAPH 228).

Forecast Reports.

1. A forecast report should be brief. All that Government requires is to be satisfied that the financial prospects are such as to justify the undertaking of a general re-assessment, failing that, that there are other reasons which make a resettlement desirable.

Rule 13 of the rules framed under section 60 (b) of the Land Revenue Act [vide Appendix I—Part (E)] provides that leading agriculturists and organisations of zamindars shall be consulted before the report is prepared.

2. The only statements required are a rainfall statement and the three tables of which specimens are annexed, and also in districts in which cash rents are at all common, a table comparing the rents prevailing at the time the settlement was made and at present. The report should be illustrated by a small scale map showing tahsils, assessment circles, rivers, canals, main roads and railways.

3. The following may be adopted as a rough outline of the subjects to be dealt with in the report:—

I.—PRELIMINARY.

- ✓(a) Physical features.
- ✓(b) Rainfall.
- ✓(c) Present assessment circles and classification of soils.
- ✓(d) Character of agricultural population.
- ✓(e) Any factors affecting the general prosperity of the tract, as an increase in water-logging.

It ought to be possible to dispose of the above in five short paragraphs.

II.—DEVELOPMENT OF RESOURCES.

This should include such explanation and discussion of the figures given in statement I as is required. In addition any improvements in means of communication and the progress of alienation should be noticed. The proportion of the cultivated area under mortgage in each *tahsil* (Appendix VI of Revenue Registers) should be mentioned, and the class to which the mortgagees chiefly belong.

The rise or fall in the value of land during the term of the expiring settlement should be noticed, an examination of its sale value in terms of the multiple of the land revenue paid for it at various periods being made on the lines indicated in paragraphs 381-A and 381-B of the Settlement Manual.

III.—HISTORY OF PRICES SINCE LAST SETTLEMENT WITH AN ESTIMATE OF THE EFFECTIVE RISE WHICH HAS OCCURRED.

In connection with statement II, paragraphs 376-77 of the Settlement Manual, may be read. The rise in prices should ordinarily be calculated from the comparison between the two 10 years' periods (columns 3-6 of the statement), but the Government of India have directed that the average prices for the last 20 years (columns 7-9) should be also quoted.*

*Government of India, Department of Revenue and Agriculture, No. 1005, dated 19th September 1910.

IV.—ESTIMATE OF PROBABLE ENHANCEMENT.

The increase for rise of resources may, in the absence of any special reason to the contrary, such, for example, as the substitution of canal for *barani* cultivation, be taken as equal to the rise in cultivation. The increase for rise of prices will be whatever percentage the Deputy Commissioner considers to represent the effective rise of prices. This may differ considerably from the arithmetical deduction from the figures in column 5 of statement II. For example, in deciding what percentage to adopt as showing the effective rise more regard should be paid to the prices of crops which farmers grow largely for sale than to those of crops grown mainly for their own consumption. There may be excellent reasons for departing widely in actual assessment from the arithmetical result shown in column 8, statement III. Column 9 should show the demand which the Deputy Commissioner thinks can prudently be fixed. If it differs much from the assessment shown in column 8, the reasons for thinking the latter excessive should be shortly stated.

The net-assets estimate of each circle prepared at last settlement should be varied according to the effective rise of prices and changes in resources so as to represent the probable net-asset estimate based on the most recent figures available. The probable new demand should not exceed one-fourth of that figure.

V.—OTHER MATTERS.

In reporting on the maps and records the Deputy Commissioner should say how far he thinks it will be necessary to remeasure the villages and to make a complete revision of their records.

It should also be clearly stated (a) whether a professional riverain traverse survey has been previously carried out and in what years, (b) whether an adequate number of the pillars marking corners of squares which were demarcated and erected by the previous professional survey on the higher margin of the riverain area under inundation are still *in situ*.

It is not necessary for him to make proposals as to the establishment required for settlement operations, but he should state for each *tahsil* what is the number of (1) *patwaris*' circles, (2) *patwaris* and assistant *patwaris*, and (3) field *kanungos*, and should note whether he thinks the existing staff adequate for the requirements of the ordinary revenue work of the district.

STATE ENT I.—DEVELOPMENT OF RESOURCES.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Tahsil.	Assessment circle.	POPULATION.				WELLS IN USE.		CULTIVATED AREA, IN ACRES.*						HARVESTED AREA, IN ACRES.†			
								Chak.		Barani.		Total.					
		1881.	1891.	1901.	1911.	Settled.	Now.	Settled.	Now.	Settled.	Now.	Settled.	Now.	Settled.	Years ending.	Years ending.	Years ending.

* Other columns may be added for other classes of land.

† In columns 16 *et. seq.* show average results for two or more cycles of years. A cycle may consist of from five to ten years.

STATEMENT II.—PRICES.

1	2	3	4	5	6	7	8	9
Crop.	Percentage of crop to total harvested area of both harvests.	Prices prior to last settlement.	Average prices of past 10 years.	Rise per cent.	Multiple of column 5 by column 2.	Average prices of past 20 years.	Rise per cent.	Multiple of column 8 by column 2.

Column 1.—Only enter the chief crops, say crops covering 75 per cent. of the harvested area.

Column 2.—The average area under the crops for a series of years should be compared with the average total harvested area of the same series of years, and the percentage taken out.

Columns 3 and 4.—Enter average Gazette prices for ten years excluding famine years.

Column 5.—The general rise for all crops is obtained by dividing the total of column 6 by the total of column 1. Thus if the total of column 1 is 75 and that of column 6 is 1,875, the general rise will be shown as 25 per cent.

Column 7.—Enter average Gazette prices for 20 years excluding famine years.

STATEMENT III.—ASSESSMENT, PRESENT AND PROPOSED.

1	2	3	4	5	6	7	8	9
Tahsil.	Assessment Circle.	Demand of last settlement.	Present demand.	Increase for rise of recourses at per cent.	Total of column 4 and column 5	Increase for effective rise of prices at per cent.	Total of column 6 and column 7.	Probable new demand.
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.

Appendix III. CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB.

No.	District.	3		4		5		6		7		REMARKS
		From	To	From.	To	From	To	From	To	From	To	
1	Hissar—											
	(a) Main part of the district.	1840	1860	1863	1883	..	..	..	..	..	..
	(b) Nail tract	1852	..	..	..	..	..	..	..	..	..
	(c) Hissar, Hansi, Bhiwani and Fatehabad tahsils, except Rangol and Nail circles of the Fatehabad tahsil.	..	..	..	..	..	..	..	..	..	..
	(d) Rangol and Nail circles of Fatehabad tahsils	..	..	..	..	..	..	..	..	..	..
2	(e) Sirsa tahsil	1858—63	1874—76	1881	1901	1903	1918	1922	1941	
	Rohtak—	1838—40	1870	1879	1909	1909	1939	..	..	..	..
	(a) Main part of district	1863	1870	1879	1909	1909	1939	..	..	..	..
	(b) Jhajjar and Bahadurgarh territory.	1842	1870	1880	1909	1910	1939	..	..	..	..
	(c) Sonapat tahsil	1842	1870	1880	1909	1910	1939	..	..	..	..
3	Gurgaon—	1837—42	1872	1877	1907	1907	1937	
	(a) Rewari tahsil	1844	1870	1880	1909	1909	1939	..	..	..	..
	(b) Palwal, Nuh, Ferozpur-Jhirka and Gurgaon tahsils.	1844	1870	1880	1909	1909	1939	..	..	..	..
	(c) Ballabgarh tahsil..	1844	1870	1880	1909	1909	1939	..	..	..	..
		1844	1870	1880	1909	1909	1939	..	..	..	..

Appendix III—continued.

CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONTINUED.

No.	District	3		4		5		6		7		REMARKS
		From	To	From	To	From	To	From	To	From	To	
4	Karnal—											
	(a) Panipat tahsil and part of Karnal tahsil ..	1842	1872	Kharif 1879	Rabi 1909							
	(b) Mandial tract ..	1856		Kharif 1890—88	Rabi 1909—08							
	(c) Rest of district ..	1856	1879									
5	(d) Karnal, Panipat, Keshiwal and Thanesar tahsils ..											
	Ambala—											
	(a) Ruzar and Kharar tahsils ..	1849—53	1883	Kharif 1887-88	Rabi 1908-09	{ Kharif 1917; Kharif 1919	Rabi 1947					
	(b) Ambala, Karnal and Jagadhri tahsils ..											
6	Simla—											
	(a) Simla { Bhawalilua Simla tahsil { Kharif 1883-84		Rabi 1913-14	Kharif 1916	Rabi 1946							
	(b) Kot Khali tahsil ..			Rabi 1917	Kharif 1946							

Kangra—									
(a) Kangra Tahsil ..	1850	1879	Khariif 1889—91	Rabi 1910	Khariif 1917 Rabi 1918 Khariif 1916 Rabi 1918	Rabi 1947 Khariif 1945 Rabi 1948	..	..	..
(b) Palampur tahsil ..							..	..	..
(c) Kurpur tahsil ..							..	..	..
(d) Dehra tahsil ..							..	..	..
(e) Hamirpur tahsil ..							..	..	..
(f) Dada Siba Jagir ..							..	..	..
(g) Kulu ..							..	..	..
(h) Sera ..	1851	1871	Khariif 1871	Rabi 1891	Khariif 1891	Rabi 1911	Rabi 1942	..	..
(i) Wadri Rupl ..	1878	1888	Khariif 1891	Rabi 1911	Khariif 1912 Rabi 1911	Rabi 1942 Rabi 1911	..	..	..
(j) Waziri Lahaul ..	1851	1871	1871	1891	Khariif 1891 Rabi 1892	Rabi 1942 Rabi 1943	..	..	..
(k) Waziri Spiti ..							..	..	..
Hoshlarpur—							..	..	..
(a) Hoshlarpur, Garh- shankar and Dasuya tahsila.	1852	1882	Khariif 1884	Rabi 1914	Khariif 1915	Rabi 1945	..	..	..
(b) Una tahsil ..	1850	1879	Khariif 1881	Rabi 1911	Rabi 1914 Khariif 1915	Khariif 1943 Rabi 1935	..	..	..
(c) Urban assessment (Hoshlarpur Mandi).	..	..	..	..	..	..	..	..	..
Jullundur—							..	..	..
(a) Jullundur tahsil ..	1849—51	1881	Khariif 1885	Rabi 1915	Khariif 1915 Rabi 1916 Khariif 1915	Rabi 1945 Khariif 1945 Rabi 1946	..	..	..
(b) Nakodar ..							..	..	..
(c) Phlaur ..							..	..	..
(d) Nawanshahr ..							..	..	..
Ludhiana —							..	..	..
(a) Samrala tahsil ..	1850—53	1880	Khariif 1882—83	Rabi 1912-13	Khariif 1911 Khariif 1912	Rabi 1941 Rabi 1942	..	..	..
(b) Ludhiana ..							..	..	..
(c) Jagraon tahsil ..							..	..	..

The original term of ten years was extended for a further period of ten years by Punjab Govern-
ment, Revenue Depart-
ment, letter No. 92-8-92-
13778, dated 28-11-24.
Term of assessment on
urban areas is the
same as that anno-
tated for agricul-
tural lands.

Appendix III—continued.
CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONTINUED.

1	2	3		4		5		6		7		8	
No.	District.	First regular settlement as sanctioned.		First revised settlement as sanctioned.		Second revised settlement as sanctioned.		Third revised settlement as sanctioned.		Fourth revised settlement as sanctioned.		REMARKS.	
		From	To	From	To	From	To	From	To	From	To		
11	Ferozepore—											Subject to the condition that the settlement will be terminable, if conditions are entirely altered by the opening of a new canal and to the proviso that the water advantage rate may be revised if the working of the Grey Canals is materially altered.	
	(a) Moga tahsil ..					{ Rabi 1913 } { Kharif 1942 } { Rabi 1943 }	Kharif 1942 Rabi 1943	..	..	..	..
	(b) Zira " ..	1853	1883	Kharif 1887-88	Rabi 1012-13	{ Kharif 1913 }	Rabi 1943	..	..	..	..
	(c) Ferozepore tahsil ..							..	..	..	..
	(d) Muktesar tahsil ..	1885	1865	1870	1893	Kharif 1893 Kharif 1902	R bi 1913 }	{ Rabi 1914 } { Kharif 1913 }	Kharif 1943 Rabi 1944
	(e) Fazilka tahsil ..	1853-63	1874-76	Kharif 1881	Rabi 1901			{ Kharif 1914 }	Rabi 1944
12	Lahore—											*Term further extended from 1921 to 1930,—see Punjab Land Revenue Act No. 92 of 1921, dated 16th April 1924.	
	(a) Lahore tahsil ..												
	(b) Kasur " ..	1866	1866	1868	1888	Kharif 1891 and Rabi 1893	Rabi 1912 and Kharif 1913	{ Kharif 1915 } { Rabi 1914 }	Rabi 1935 Kharif 1933	..	..
	(c) Chumian " ..							{ Kharif 1915 } { Rabi 1914 }	Rabi 1935 Kharif 1933	..	..
	(d) (i) New Pattoki Mandi, ..							{ Kharif 1915 } { Rabi 1914 }	Rabi 1935 Kharif 1933	..	..
	(ii) Old Pattoki Mandi, ..							{ Kharif 1915 } { Rabi 1914 }	Rabi 1935 Kharif 1933	..	..
	(iii) Urban areas, Lahore.							{ Kharif 1915 } { Rabi 1914 }	Rabi 1935 Kharif 1933	..	..

*Term further extended from 1922 to 1930, — 1946
 Punjab Government
 Order No. 92-A-12-192,
 dated 16th April 1924.

Subject to the condition that the settlement will be terminable, if conditions are, entirely altered by the opening of a new canal and to the proviso that the water advantage rate may be revised if the working of the Grey Canals is materially altered.

13

Amritsar—

(a) Tara Tara tahsil..

(b) Amritsar ..

(c) Ajnala ..

(d) 5 villages transferred from Rays tahsil to Ajnala tahsil by Punjab Government, Notification No. 504, dated 30th July 1915.

1852

1862

1865

1885

{ Kharif 1891

{ Kharif 1892

{ Rabi 1893

{ ..

{ ..

{ ..

{ ..

{ ..

{ ..

{ ..

14

Gurdaspur—

(i) Main part of district.

(ii) Part of Pathankot tahsil.

(a) Gurdaspur tahsil ..

(b) Batela ..

(c) Shahargarh ..

(d) Pathankot ..

1852

1862

1865

1885

{ Kharif 1889

{ to Kharif 1891

{ Rabi 1899

{ to Kharif 1910

{ ..

{ ..

{ ..

{ ..

{ ..

{ ..

15

Sialkot—

(a) Sialkot tahsil ..

(b) Narawal tahsil ..

(c) Pauri tahsil ..

(d) Daska tahsil ..

1854—56

1864—66

1865

1885

{ Kharif 1891-94

{ Rabi 1911-14

{ Rabi 1915

{ Kharif 1914

{ Rabi 1943

{ Kharif 1944

{ Rabi 1943

{ Kharif 1944

{ Rabi 1943

{ Kharif 1944

16

Gujranwala—

(a) Gulranwala tahsil—

(i) 545 villages ..

(ii) 29 villages ..

1856

1866

1868

1888

{ Kharif 1892

{ Rabi 1911-14

{ Kharif 1912

{ Rabi 1913

{ ..

{ ..

{ ..

{ ..

{ ..

{ ..

*Question of re-assessment of 5 villages to be considered with the rest of the district in 1932.

Thirty years' term sanctioned provided that the canal occupiers' rates are left open to periodical revision.

Deferred till the whole district becomes due for re-assessment.—vide Punjab Government order No. 237 B., dated 12th February 1925.

Appendix III—continued.
CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONTINUED.

1	2	3	4	5	6	7	8					
No.	District.	First regular settlement as sanctioned.		First revised settlement as sanctioned.		Second revised settlement as sanctioned.		Third revised settlement as sanctioned.		Fourth revised settlement as sanctioned.		REMARKS.
		From	To	From	To	From	To	From	To	From	To	
16.	Gujranwala— <i>consid.</i> (b) Wasirabad talai ..	1856	1866		1888	Kharif 1882 Rabi 1894 ..	Rabi 1912 Rabi 1904 ..	Kharif 1912 Kharif 1904-05 ..	Kharif 1925 Rabi 1926 Kharif 1926			
17	(c) Hafizabad talai .. (d) Urban areas .. 1. Sheikhpura talai, formerly Khanguan Dogran talai .. (e) Lower Chenab Bar .. (f) Upper Chenab Bar .. (g) Colony villages, Rabi Branch. (h) Colony villages Guera Branch, Circle I. 2. Nankana Sahib talai— (a) All villages except 23 estates transferred from Gujranwala talai	1856 .. 1856 Kharif 1882 Kharif 1897-99 Kharif 1892 Kharif										

Appendix III—continued. CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONTINUED.

1	2	3		4		5		6		7	8
No.	District.	First regular settlement as sanctioned.		First revised settlement as sanctioned.		Second revised settlement as sanctioned.		Third revised settlement as sanctioned.		Fourth revised settlement as sanctioned.	REMARKS.
		From	To	From	To	From	To	From	To	From		To
	(ii) Irrigated villages of—										
	(a) above (Gujrat tahsil)	..	..	..	..	..	..	..	..	..	..
	(b) above (Kharian tahsil)	..	..	..	..	..	..	..	..	..	..
	(c) above (Faisal tahsil)	..	..	..	..	..	..	..	..	..	..
	(iii) Eight villages transferred from Shahpur to Gujrat District affected by Lower Jhelum Canal.	..	..	..	..	..	..	..	..	..	..
19	Shahpur—										
	(a) Bhalwal, Shahpur and Sargodha tahsils.	1856—64	1881	Kharrif 1889 to Rabi 1893	Rabi 1909 to Kharrif 1912	Rabi 1916	Kharrif 1945	..	..	..	..
	(b) Khushab tahsil extending Thal and Mohar Circles.					Rabi 1916	Kharrif 1944	..	..	..	..

The term of the existing assessment in the Thal and Mohar Circles of the Khushab tahsil has been extended so as to bring in line with the rest

*The term of the existing settlement in the Thal and Mohar Circles of the Khushab tahsil has been extended so as to bring it in line with the rest of

Appendix III—continued.
CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONTINUED.

1	2	3		4		5		6		7	8
No.	District.	First regular settlement as sanctioned.		First revised settlement as sanctioned.		Second revised settlement as sanctioned.		Third revised settlement as sanctioned.		Fourth revised settlement as sanctioned.	REMARKS.
		From	To	From	To	From	To	From	To		
20	Jhelum— Jhelum, Chakwal and Pind Dadan Khan tahsils.	1859	Rabi 1879	Kharif 1879	Rabi 1901	Kharif 1901	Rabi 1932	..	..	..
21	Rawalpindi— (a) Gujar Khan tahsil .. (b) Rawalpindi " .. (c) Kahuta " .. (d) Murree " ..	1859—63		1885	1905	{ Kharif 1905 } { Kharif 1905 }	Rabi 1935 Rabi 1936	..	..	..

Appendix III—continued.

CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONTINUED.

1 No.	2 District.	3 First regular settlement as sanctioned.		4 First revised settlement as sanctioned.		5 Second revised settlement as sanctioned.		6 Third revised settlement as sanctioned.		7 Fourth revised settlement as sanctioned.		8 REMARKS.
		From	To	From	To	From	To	From	To	From	To	
25	Lyalpur—											
	(a) Jhang Branch Circle	..		..		Kharif 1921						
	(b) Gugera Branch, Circle I.	Kharif 1897—99	Rabi 1907—09	Rabi 1911	Kharif 1920	Kharif 1922						
	(c) Gugera Branch, Circle II.			Rabi 1912	Kharif 1921							
	(d) Gugera Branch, Circle III.	..	..	..	..	Rabi 1923						
	(e) Mehra Nupewala and Kullianwala extension			Kharif 1913	Rabi 1923	Rabi 1924		..	..	..	..
	(f) Bahial extension ..			Kharif 1914	Rabi 1924	Kharif 1924						
	(g) Proprietary villages	Rabi 1902—06	Kharif 1912—16									
	(h) Dangali extension			Kharif 1916	Rabi 1926	Kharif 1926						

(f) Bath Branch	Kharif 1902	Rabi 1912	Rabi 1913	Kharif 1902
(j) Bath Mana Chaks	"	"	"	"
(k) Gangapur	"	"	"	"
(l) Chak No. 203-Bath Branch.	"	"	"	"
(m) Chak No. 535-Gugera Branch.	"	"	"	"
(n) Chak No. 635-Gugera Branch.	"	"	"	"
Urban areas	"	"	"	"
Jhang—				
(o) Jhang Tahsil (Non-Colony).	1856		Kharif 1879	Rabi 1899
Chinot Tahsil (Non-Colony).	1856	1866		
Shorkot Tahsil (Non-Colony).				
(p) Chenab Nahri	"	"	"	"
(q) Chenab	"	"	"	"
(r) Jhelum Nahri	"	"	"	"
(s) Colony villages on Jhang Branch.	"	"	"	"
(t) Colony villages on Bhang extension.	"	"	"	"

Appendix III—continued.

CALENDAR OF LAND REVENUE SETTLEMENTS IN THE PUNJAB—CONCLUDED.

1	2	3		4		5		6		7		8
No.	District.	First regular settlement as sanctioned.		First revised settlement as sanctioned.		Second revised settlement as sanctioned.		Third revised settlement as sanctioned.		Fourth revised settlement as sanctioned.		REMARKS
		From	To	From	To	From	To	From	To	From	To	
27	Multan—											
	(a) Kabirwala Tahsil—											
	(1) 8 villages transferred from Jhang district ..	1856	1866									
	(2) Main tahsil ..											
	(b) Malak tahsil ..											
	(c) Multan ..											
	(d) Shujabad ..											
	(e) Lodhran ..											
	(f) Khanewal ..											
	(1) Villages transferred from Kabirwala tahsil ..	1858	1873	1870	1899	Kharif 1899—1900	Rabi 1919-20	Kharif 1922	Rabi 1952.			
	(2) Villages transferred from other tahsils ..							Kharif 1920	Rabi 1929			

The fluctuating canal rates will be subject to modification if this be found advisable on the introduction of perennial irrigation in the case of Sidhmal canal with the addition of occupier's rates.

The fluctuating canal rates will be subject to modification if this be found advisable on the introduction of perennial irrigation in the case of Sidhni canal with the addition of occupier's rates.

Muzaffargarh—

(a) Muzaffargarh tahsil

(b) Alipur "

(c) Loh "

(d) Kot Adu "

Dera Ghazi Khan—

(a) Sangar tahsil

(b) Dera Ghazi Khan tahsil

(c) Jampur tahsil

(d) Rajapur "

1878

1898

Khari
1902
Khari
1903
Khari
1901

Rabi
1922
Rabi
1923
Rabi
1921

Khari
1925

1874

1895

Khari
1906

Rabi
1916

Khari
1919

Rabi
1949

APPENDIX IV.

(SETTLEMENT MANUAL, PARAGRAPH 232.)

Judicial powers exercised by Settlement Officers at different periods.

SHORTLY after annexation the Board of Administration forbade the Civil Courts in the districts west of the Bias to entertain any claims for land till a regular settlement had been effected, and at the same time the district revenue courts were directed to "confine their attention to the question of possession, and leave to the Settlement Officers hereafter the decision of disputed rights," (Board's Circular No. 122, dated 30th May 1849). A little later the provision of Regulation VII of 1822, which allowed a disappointed claimant to contest the finding of a Settlement Officer by bringing a civil suit in the District Court, was set aside with the sanction of the Governor-General, and the decision of Settlement Officers in all cases decided on their merits after full enquiry were made final "subject to the usual revenue appeal."* Settlement Officers were vested with the full powers of Civil Courts as regards land suits.† The period of limitation was fixed at 12 years, and this was sometimes interpreted as meaning 12 years counting back from the date of annexation or from the date on which the claim was first put forward in the district revenue courts. When the first Panjab Courts Act, XIX of 1865, came into force, care was taken to maintain the jurisdiction of Settlement Officers as regards land suits. The 21st section of that Act provided that, when a district was under settlement, any special officer in it might be invested with the civil powers of a Commissioner, Deputy Commissioner, Assistant Commissioner, or *tahsildar* for the purpose of deciding suits in respect to land, or the rent, revenue, or produce of land. Similar provisions were embodied in section 49 of the second Panjab Courts Act, XVII of 1877, and in Chapter VI of the third Panjab Courts Act, XVIII of 1884. Down to 1878 Settlement Officers were usually invested with the powers of a Deputy Commissioner to decide suits or appeals regarding land, or the rent, revenue, or produce of land. But in the districts of the old Delhi territory re-assessed between 1871 and 1878 it was determined to confine the jurisdiction of the Settlement Courts to cases under the Tenancy Act of 1868, on the ground that these districts "were settled many years ago and the rights of all parties must have been determined either by length of possession or by decree of Courts." In 1878 it was proposed to follow the same course in all the districts then about to come under settlement, but ultimately the jurisdiction of the Settlement Courts was made to extend to suits—

- ✓(a) under the Tenancy Act ;
- ✓(b) to alter or cancel any entry in the register of names of proprietors of revenue-paying land ;
- ✓(c) under section 9 of the Specific Relief Act of 1877 ;
- ✓(d) for declaration of title in land, or the rent, revenue, or produce of land brought by parties in possession of the right claimed.

It was also intended that claims under head (b) should only be cognizable by Settlement Courts where the plaintiff was in possession. The description under head (b) was not considered sufficiently precise and was gradually expanded

*Government of India No. 1602, dated 1st September 1849, quoted on page 41 of Barkley's "Non-Regulation Law of the Punjab." This order referred only to the Cis-Sutlej and Trans-Sutlej States, the only parts of the province where regular settlements were then in progress.

†See Temple's Settlement Report, paragraph 220, and Financial Commissioner's Book Circular XLVI of 1860, paragraph 1.

but the changes made were intended to define, and not to restrict the powers hitherto possessed in cases between landlords and tenants. In 1886, a fresh form of notification was introduced giving Settlement Officers the powers of a Deputy Commissioner, under section 46 (1) of the Punjab Courts Act of 1884, for the trial of all classes of suits mentioned in section 45 of the same Act, with six exceptions. The effect was to withdraw from Settlement Officers' jurisdiction in suits under heads (b) and (d) above, but to enable them to decide suits for the determination of "disputes regarding boundaries of land which have been fixed by a Court or Revenue Officer." Chapter VI of Act XVIII of 1884 was repealed by the Land Revenue Act of 1887, but Chapter XI of the latter Act enables Government, if it pleases, to make land cases in any local area solely cognizable by the officer making or specially revising records-of-rights in that area. So far no use has been made of this chapter and Settlement Officers are now invested only with the powers of a Collector under the Tenancy Act, XVI of 1887, and their exercise of these powers is confined within narrow limits by executive instructions (see Appendix VI).

**APPENDIX V.
CANCELLED.**

APPENDIX VI.

(SETTLEMENT MANUAL, PARAGRAPH 229.)

**BUSINESS TO BE DISPOSED OF BY SETTLEMENT OFFICERS,
DIRECTOR OF LAND RECORDS AND THE COM-
MISSIONER.**

**A.—TABLE SHOWING BUSINESS ARISING UNDER THE PUNJAB LAND
REVENUE AND TENANCY ACTS WHICH WILL BE DISPOSED
OF BY SETTLEMENT COLLECTORS.**

Land Revenue Act.

1. Chapter III of Land Revenue Act relating to headmen (other than chief headmen), kanungos and patwaris ; also cases of neglect of duty or disobedience of orders by any person holding office under this chapter so far as those duties or orders relate to business controlled by the Collector. If cases come to the notice of the Settlement Officer requiring action under Land Revenue Rule 21 (IV) he should report them to the Deputy Commissioner.

The Collector of the district should consult the Settlement Collector before finally disposing of successions to zaildarships, but is not bound to adopt his recommendation. Proposals for revision of zaildari arrangements should be prepared by the two Collectors jointly.

2. Chapter IV of Land Revenue Act (Records).

3. Chapter V of Land Revenue Act (Assessments).

4. Chapter VIII of Land Revenue Act (Surveys and Boundaries).

5. Chapter IX of Land Revenue Act (Partition).

6. The following sections of Chapter XII of the Land Revenue Act :—*viz.* Sections 145, 146, 147, 148 and 150, also section 149 so far as concerns business allotted to this Collector.

Punjab Tenancy Act.

7. Section 76, sub-section (1), clause (a) and section 77, sub-section (8), clauses (a), (b) and (c), also clause (m) so far as it concerns kanungos and patwaris.

NOTE 1.—The Settlement Collector has no powers under chapters VI and VII of the Land Revenue Act ; but the Collector of the district should refer to him for report all cases in which remissions or suspensions of the land revenue appear to be required on account of calamity or season or other failure of assets. Similarly, the Settlement Collector may, of his own motion report such cases to the Collector of the district for orders. It is important that the officer who is charged with the duty of revising the assessments should enquire into all cases of this kind, and the Collector of the district should not set aside his recommendations in any case without the sanction of the Commissioner.

NOTE 2.—Of the quarterly and annual business returns, part V, which relates to village records and also all crop returns and agricultural statistics (other than those relating to prices and rainfall), should be submitted by the Settlement Collector, and all other returns by the Collector of the district.

NOTE 3.—For business connected with land revenue assignments, see paragraph 180 of the Land Administration Manual and paragraphs 568, *et seq.*, of this Manual.

**B.—WORK IN CONNECTION WITH SETTLEMENTS WHICH WILL BE
DISPOSED OF BY THE COMMISSIONER AND DIRECTOR OF LAND
RECORDS.**

1. Duties of the Commissioner and Director of Land Records in districts under settlement.—The Commissioner will exercise general control in all matters connected with the conduct of settlements within his division subject to the directions of the Financial Commissioner. He will supervise all matters connected with settlement operations and consult and advise the local officers thereon. The position of the Director of Land Records in regard to map correction and revision of records in settlements is defined in paragraph 207, Land Administration Manual. He will aid the Settlement Officer with his advice, but on matters requiring orders he will report to the Financial Commissioner who will issue his orders to the Settlement Officer through the Commissioner of the division.

2. Submission of reports from districts under settlement.—Reports, references and returns relating to settlements shall be submitted (by the Deputy Commissioner, prior to the commencement of a settlement, and by the Settlement Officer afterwards) to the Commissioner, who will himself dispose of all matters he has power to dispose of and refer other matters with his opinion for the orders of the Financial Commissioner.

The quarterly business returns in districts under settlement, prescribed in Standing Order No. 52, are submitted by the Settlement Officer to the Commissioner. The Commissioner returns statements I to III with his remarks to the Settlement Officer, while statements IV and V in duplicate are forwarded with his comments to the Director of Land Records. The Director of Land Records records his remarks and forwards them to the Financial Commissioner. One copy is filed in the Financial Commissioners' office, one copy is returned with the orders of the Financial Commissioner through the Director of Land Records to the Commissioner, and by the latter to the Settlement Officer.

3. Preliminary reports and special reports.—Settlement Officers are required to submit preliminary reports regarding assessment circles, soil classification, prices, the extent of re-measurement required, and the years to be adopted in framing the produce estimate (paragraph 225 of the Manual). Such reports will be submitted to the Commissioner who will forward them with his recommendations to the Financial Commissioner for orders. The Financial Commissioner will consult the Director of Land Records if he considers it necessary before passing orders. The orders of the Financial Commissioner will be communicated through the Commissioner to the Settlement Officer, a copy being sent to the Director of Land Records for information.

Reports are submitted by the Settlement Officer on the following subjects through the Commissioner for the orders of the Financial Commissioner :—

- (a) All questions connected with forests and Government waste.
- (b) Leases of Government land.
- (c) Tirmi.
- (d) Land revenue assignments.
- (e) Zaildari and sufedposhi inams.

The orders of the Financial Commissioner on these cases are communicated to the Settlement Officer through the Commissioner, and the Director of Land Records need not be referred to in connection with these subjects.

4. Settlement budgets and accounts.—The control over settlement budgets and accounts and all other administrative authority and powers referring to settlements are now exercised by the Commissioner subject to the orders of the Financial Commissioner. Previously established settlement procedure should not be departed from without the sanction of the Financial Commissioner.

5. Completion of miscellaneous work by the settlement Officer.—It will be the duty of the Commissioner at the commencement of the concluding year of a settlement to see that all reports on such subjects as revenue assignments, patwaris' and zaildars' circles and emoluments, leases of Government land and tirni are submitted through him to the Financial Commissioner in good time so that orders may be passed and carried out before the Settlement Officer leaves the district. Any changes in the record of agricultural or revenue statistics which the Settlement Officer has to suggest should be submitted to the Commissioner and by him through the Director of Land Records to the Financial Commissioner for orders. The *Dastur-ul-amal* proposals should be submitted to the Commissioner who will approve of them after consultation with the Director of Land Records.

6. Powers, postings and leave of Settlement officials.—(a) 'Proposals for conferring on any Settlement Officer, Assistant Settlement Officer or Extra Assistant Settlement Officer powers which it is not usual to confer on members of the class to which he belongs should be submitted by the Commissioner through the Financial Commissioner.

(b) Matters relating to (i) leave of officers in charge of a settlement, and (ii) first appointments of Settlement Officers, Assistant Settlement Officers and Extra Assistant Settlement Officers are dealt with by the Financial Commissioner.

(c) The posting of officers for settlement training will be arranged by the Commissioner in direct communication with Government, but the reports on the training of the officers will be submitted to the Financial Commissioner.

7. Settlement kanungos.—(i) At least two months before he begins to reduce establishment, the Settlement Officer should report to the Director of Land Records the names, with full particulars as to home, previous experience, &c., of all permanent and sub. *pro tem.* settlement kanungos who are likely to be set free from his settlement.

(ii) The Director of Land Records should provide for these kanungos in some other settlement. Officiating kanungos must make room for permanent and sub. *pro tem.* men, and sub. *pro tem.* men for those who are permanent.

(iii) If it can be arranged, kanungos should be posted to settlements as near as possible to their homes.

(iv) Kanungos who have done measurement by triangulation in a hill tract should be specially selected for similar work elsewhere when required.

APPENDIX VII.

(SETTLEMENT MANUAL, PARAGRAPH 256).

A.—PROCEDURE CONNECTED WITH THE COMPLETE MEASUREMENT OF A VILLAGE.

1. **Preparation of khataunis and shajra nasb.**—Before commencing the field measurements of any village it is essential that correct and complete *khataunis* should be drawn up. If the previous annual papers have been properly prepared, and the *jamabandi* is correct to date, this will give little trouble. If it is not correct, then all mutations of rights omitted from the *jamabandi* must be entered up in the list of mutations of the current year. The *khataunis* will then agree with the *jamabandi* so corrected *plus* changes in tenants-at-will. And to make sure that the *khataunis* are correct and complete, there will be drawn up at the same time a *shajra nasb* of the owners.* The procedure will therefore be as follows :—The *kamungo* or *patwari*, having collected the owners in the village, will put the last *jamabandi* before him, and draw up a genealogical tree of the owners ; or if there is one in the previous records, correct that to date. In doing this he will compare the genealogical tree and the *jamabandi*, holding by holding, and will explain the entries to the owners. The comparison of the two papers will bring to light all omissions from the *jamabandi* connected with the descent of the owners, and omissions from the *jamabandi* due to transfers, partitions, changes of tenants, and other like causes, will be pointed out by the owners. Forms of the *khatauni*, index, and list of *khatauni* totals, with necessary instructions, are appended :—

A.—KHATAUNI OR HOLDING SLIP.

Tahsil _____ Mauza _____ { Taraf or Patti. } _____

Last Jamabadi No.	Owner.
New Khatauni No.	
No. in Register of Mutations.	Tenant.

1		2	3	4	5
No. AND NAME OF FIELD.		Name of well or other source of irrigation.	Area and class of land and total of holdings.	Rent.	REMARKS.
Former.	New.				

*For form of *shajra nasb* and instructions for its preparation see Appendix VII

(1) This form will be printed on one-eighth of a sheet, that is to say, on paper size 10" — 6½". It will be printed on one-side only. If necessary, the *patwari* can continue the entries on the other side. Lines will be printed across columns 1—8 for the separate entry of each field. The whole will be sewed together at top, like a *bahī*, the alphabetical index being added. A leather *patta* will also be added to protect the paper of the same sort as is used to protect *bahis*. One leaf will usually be sufficient for each holding.

(2) The *khatauni* numbers will be entered in ink before measurements are commenced. There is no real reason why an accurate list of the holdings should not be made. If by chance one or two holdings are subsequently discovered, these can be added in their place by sub-numbers. When the *tahsildar* attests the village finally after close of measurements, the series of numbers can be corrected once for all.

(8) The names and shares of owners and cultivator should be entered with great care and after careful attestation. If names and shares have already been entered in one holding in full detail, and in a subsequent holding it is desired to incorporate the same entry by reference, this may be done; for example, *Sham Singh and others, as in holding No. 3 (three)*. But the number of the holding must be entered in such cases in figures and in words: and care should be taken that short entries referring to different holdings are not made in nearly identical terms. Also the reference should always be to the *khatauni* number: the measurer has nothing to do with *jamabandi* numbers.

(4) Enter shares in the plainest terms, just as the *patwari* enters them in his ordinary annual papers, for example—

A and B in even shares.

D and F in even shares half, and G and H in even shares. half.

Several persons (stated by name) in the following shares :—

K and L in even shares, half; M, N. and others, half on 3 shares :

M and N in even shares	O, P & R in even shares
2 shares.	1 share.

If there are a great many shares, write them out in full on the back of the *khatauni*, making a short entry in the column 'Owner' on the upper side: thus *A, B, and others, total 15 owners as detailed on reverse*. It is most important that all shares should be entered in the village papers in the same words and terms as those by which the *zamindars* described them. No attempt should be made to substitute for these terms more elaborate descriptions. And those forms of expression should be preferred which will be most conveniently transcribed in the annual papers. It is not at all necessary to describe all the shares of a holding by the same denominator; they should be put down just as the *zamindars* tell them off.

(5) As regards sales and mortgages with possession (they should be shown in every case with the detail directed in the Standing Order on Records-of-Rights.

(6) Mortgages without possession will be entered only under the circumstances and with the details directed in the Standing Order on Records-of-Rights.

(7) If a hereditary tenant has sold or mortgaged his holding and the transfer has been acted on, it will be entered in the register of mutations and incorporated in the *khatauni*, subject to any order of Court that may be produced concerning a transfer of this nature.

(8) Enter very carefully the rents paid by tenants. If the rent is a share of the produce, note any payments made from the whole heap before the produce is divided. If the rent is cash, it should be so described as to show whether the rent is a lump charge on the holding or a rate per bigha, or whether the rent is per harvest or per crop, or per annum, or by appraisalment.

(9) Ordinarily no entry relating to trees will be made. But the *patwari* should enquire whether any trees are owned by other than the owner or cultivator; and in cases in which trees are owned by persons who do not hold the land, the *patwari* will enter the facts in the column of remarks in the *khatauni*.

(10) If the revenue of *khata* is assigned, note the fact and the name of the *mafidar* briefly in red ink in the column of remarks.

(11) Do not collect all the *mafi khatas* at the end. Let each *khata* come in the place to which, with reference to the ownership, it properly belongs.

(12) *Land appropriated for public purposes.*—All land permanently appropriated for public purposes should be entered in the *khataunis* as directed in the *jamabandi*. Mutations expressed by these entries need not be entered in the register of mutations.

(13) It is not necessary to enter a name for every field along with its number. If fields are known by names, the names should be entered. But where fields are not commonly known by distinct names, no names of fields need be entered.

(14) The following soils will be recorded in the *khataunis* —

- (i) *Ghair mumkin*, *banjar kadim*, and *banjar jadid*, as directed for the crop *girdawari* and *milan rakba*.
- (ii) *Chahi* is all land irrigated regularly from a well (whether the well is *pakka* or *kacha* and whether the water be lifted by buckets, wheel or *dhenkli*). Some land is thus irrigated every harvest, other land every year, and some land once in two years. Whatever land gets water regularly should be shown as *chahi*. The actual area of crops irrigated will not appear from the measurement papers, but from the crop *girdawari* papers.
- (iii) *Nahri* is land watered by a canal. The limits of this land will be defined in the same way as those of *chahi* land.
- (iv) *Abi* is land watered from tanks, *jhils*, river branches and springs and not falling under the heads of *chahi* or *nahri*. The limits of this land will be defined in the same way as those of *chahi* land.
- (v) *Sailab* is land usually flooded in the rains by large rivers or their branches.
- (vi) *Barani* is all cultivation not included in above classes.

The Collector can direct that other soil distinctions be recorded if he considers this necessary.*

It should be added that there is some land near rivers or canals or *jhils* which is always moist. This also should be entered as *sailab* if of any considerable amount or importance. But small areas of this kind may be recorded as *barani*. Fruit-bearing gardens will be reckoned as cultivated land, and their areas will be classed under the above heads according as they are irrigated or not. Groves of other trees will be classed as *banjar kadim*.

*See Chapter XIII of this Manual.

B.—ALPHABETICAL INDEX TO BE PREFIXED TO KHATAUNI.

LETTER.	OWNERS.	Khatauni No.	HEREDITARY TENANTS.	Khatauni No.	TENANTS-AT-WILL.	
	Name.		Name.		Name.	Khatauni No.

C.—LIST OF KHATAUNI TOTALS.

1	2	3					
Khatauni No	How many fields.	GIVE IN THESE COLUMNS THE DETAILS OF AREAS AND WELLS REQUIRED FOR THE MILAN RAKBA.					
							Total.

Column 3.—It should be borne in mind that this classification and that given in the *milan rakba* must agree.

2. **Parchas to be given to zamindars.**—When the *khataunis* are ready, the *patwari* will give to each agriculturist a copy of the *khataunis* relating to him. These copies are known as *parchas*. Of mortgaged holding a *parcha* will be given both to mortgagor and mortgagee, but not to collateral mortgagees. In holdings in which there are several sharers it is generally sufficient to give a *parcha* to one sharer; but if another sharer asks for a copy, it should be given to him also. Of tenant's holdings one copy should be given to the tenant and the other to the owner.

3. **Attendance of owners and cultivators.**—The *shajra nash* and *khataunis* having been completed, and the *parchas* having been distributed to the *samindars*, the *patwari* will commence measurement work. Every evening he will inform the village headmen what fields will be measured on the day following, and the village-headmen will at once inform the owners and cultivators concerned, and direct them to attend the *patwari* the following morning.

4. **Chainmen.**—The headmen of the village will supply for the field work two chainmen.

5. **Papers which pawtari will have with him.**—The *patwari* should have with him during his field measurements the former *shajra*, his copy of the last detailed *jamabandi* (with alluvion and diluvion papers, if any), also the new *shajra nasb* and register of mutations. These papers and the papers in hand are the only papers that he should take with him in his daily measurement work.

6. **Procedure as each field is measured.**—As each field is measure he will delineate it in pencil on the *shajra*, work out the area, inform the owner and cultivator of the result, consider their objections, if any, and then write up the field book, the *khatauni*, and *zamindar's parcha*. The form of the field book is given below :—

Field Book.

No. of field.	Former No.	No. of <i>khatauni</i> .	Area calculation.
---------------	------------	-----------------------------	-------------------

7. **List of fields on margin of field map.**—In order to make it easy to refer from the field map to the *jamabandi*, the *patwari* will write a list on a separate mapping sheet (to be filed with the map) as under :—

No. of field.	Number of <i>khatauni</i> in which entered.
---------------	---

8. **Procedure when owner or tenant is absent.**—If an owner or tenant is absent when a field is measured the *patwari* will make a mark X in the remarks column of the *khatauni*, and write over the mark the letter M or K to indicate whether the absentee is the owner or cultivator, and will sign his name under the mark. If the absentee arrives afterwards, a place will be left in his *parcha* for the field measured in his absence, and those measured in his presence will be filled in below. But the *patwari* will not fill into any *parcha* fields measured in the absence of the *parcha*-holder, nor return to those fields in order to explain the entries. It is the *kanungo's* work to do this.

NOTE.—The above procedure for securing the attendance of right-holders and keeping them informed of the entries made in the measurement papers regarding their land is not applicable to cases where Government land in the possession of a department is under measurement. Before remeasurements are commenced in any district or tract the Settlement Officer or Collector should, if there is any land of the above description within the limits of the district or tract, ascertain from the executive officer of the department concerned, who is in charge of the said land, whether he proposes to depute a subordinate to be present at the measurements. If the departmental officer desires to do so, the Settlement Officer or Collector should arrange, as far as possible, for the measurement of the Government land to be made at a time convenient both to the department concerned and to the settlement or revenue subordinates. The Settlement Officer should also, if desired by the departmental officer, furnish the latter, free of charge, with copies of the entries in the measurement papers and maps relating to the Government land in his charge, and should consider any representation made to him by the departmental officer in regard to them. In the above connection attention to the instructions contained in paragraph 45 (A) of Standing Order No. 16 is necessary.

9. Procedure in case of trifling disputes or discrepancies.—In cases of petty dispute as to the position of a boundary, if there is a permanent boundary, the *patwari* will measure according to the boundary; if there is not, then he will measure according to the former papers. He may be allowed to neglect slight differences between former and present measurement, as may be proper in each village; so that the *zamindar's* attention may not be directed to useless disputes. But if an owner has added to his field land that he owns jointly with others, except in course of partition, such land must be measured as a separate number. In places where land is of little value, if an occupancy tenant has extended his field by ploughing out, and there is no boundary between the new and old land, nor other plain evidence, such as payment of a different rent, by which the new land can be separated from the old land, the *patwari* will survey the whole in one number. In such a case it is not his duty to distinguish between old and new land.

10. Field names and order in which fields should be numbered.—The numbering of the fields on the map should run in a connected chain. So far as the fields of one holding lie together they should be measured without break. Where field divisions follow soil distinctions, the order of the holding should not be broken on this account. Similarly if the land is owned by wells or by separate *pattis*, the fields of each well or *patti* lying in one block should be numbered in a connected series, and not be mixed up in the measurement papers with those of adjoining *pattis* and wells. And the limits of each *patti* or well should be shown by a coloured line. Also if one field lies in the middle of a larger field, it should be so measured, without breaking up the larger field into two. Filed names, if locally used, should be entered under the survey number to which they relate.

11. The *abadi*.—The village site should be measured in one number, together with the small plots attached in which cattle are penned, manure is stored, and straw is stacked, and other waste attached to the village site. The entry in the column of ownership and occupancy will be simply *abadi deh*.

12. Village roads.—Village roads through irrigated lands or through highly cultivated land, or wherever these roads have distinct boundaries, should be measured according to their existing bounds. If any road has no distinct bound it should be entered as three *kadams* wide. But where the position of a way shifts with the cultivation of each year, it should be indicated in the map with a red line; and a note should be made in the *khatauni* against each field which the way crosses, thus: "*The way to village A crosses this field.*" If by acting on these instructions a village road is in any case recorded very differently from the record of it at last measurement, and public inconvenience appears probable, the road should be measured as above directed, and the case be reported to the revenue officer. Perhaps in some cases the revenue officer may be able to prevent inconvenience of this kind. But usually the fixed boundaries of village roads cannot be altered.

13. Boundaries of fields not marked on ground how shown.—Where the boundary of a survey number is known, but is not marked on the ground owing to rich cultivation or sandy soil, the boundary should be delineated on the map by broken lines.

14. Procedure at beginning and end of days' work.—At the commencement and end of every day's work the *patwari* should—

✓(a) test the chain;

(b) check the entries of number *sabik* (former field No.).

* ✓ (c) compare the area entries of the field book and *khatauni*.

14-A. Daily ou turn.—A Settlement Officer should, after he has had some experience of his district, lay down with the approval of the Commissioner his own standard of outturn per chain *per diem* in re-measurement according to the circumstances and nature of the district and communicate the same through the Commissioner and the Director of Land Records to the Financial Commissioner. This standard will be used as a guide in checking the quarterly business returns.

15. Inking in of fields.—The fields will be inked into the *shajra*, week by week, after the *kanungo* has tested them, *viz.*, field numbers in red ink, and all other entries in black ink.

16. Topographical signs to be entered in field maps.—In order to meet the requirements of the Survey of India certain topographical signs used by that department should be used. A list of the signs, together with specimen cadastral maps, can be obtained from the Financial Commissioner: these signs should be followed in all topographical and *patwaris'* maps as far as possible. When a survey party is at work in a district under settlement a few selected men should be sent to be taught by the Surveyor the proper method of representing these signs. It should be clearly understood that these directions in no case supersede those contained in the Mensuration Manual.

17. Colouring of maps.—Too much attention should not be given to the appearance of the maps as apart from correctness. The colouring, however, should usually be done by selected *patwaris* or by specially entertained colourists. If a map has become dirty or discoloured, it should be left alone, and, if owing to cracks in the paper or some other reason it is absolutely necessary to prepare a fair copy, the original should be filed as well as the copy.

18. Maps to be kept in flat boxes.—The map should be kept flat after being filed in the record room. The mapping sheets of each village should be attached together by tape or string running through two eyelets pierced in the top right and left hand corners of each sheet.

19. Index map.—Index maps should be prepared on mapping sheets, each square being divided into the requisite number of smaller squares for the purpose. Where possible, the scale to be adopted should be 240 *kadams* of $5\frac{1}{2}$ feet to the inch (4 inches to the mile), as this is the scale usually adopted in revenue survey maps. The reduction from the 40 *kadam* to the inch field maps should be done by scale. This work is facilitated by scales with inches sub-divided into sub-multiples of 240. The Director of Land Records informs Settlement Officers of the name of the firm from which such scales can be procured. To test the work rapidly the *kanungos* can be given double compasses, of which one pair of arms measures a distance exactly six times that measured by the other pair. Such compasses can be made up in most large towns. When the *karm* in use is such that the maps on the square system cannot be readily reduced to the scale of 4 inches to the mile by the use of the scale, as in Hissar, where the *karm* is 57·157 inches and in the hill part of Gurdaspur where its length is 57·5 inches, the required reduction can be made by the help of the pentagraph. Even if the proportion between the field map scale and the scale of 4 inches to the mile is not one of those for which the instrument is graduated, the pentagraph can be set empirically so as to give it. To obtain the proper setting a trial should be made with two squares made in the proper proportions, and care should be taken that the pointer and the fixed axis in which the instrument revolves are so fixed as to be always in one straight line. The index map should show the same

features as those shown in the revenue survey maps of the villages, and the signs will be those employed by the Revenue Survey Department, most of which are the same as in the 40 *kadam* village maps. Each Settlement Officer will have to give his own instructions as to the points to be shown in these maps according to the character of the country under survey. Besides serving as an index to the village map this reduction is required for two other purposes: (1) the check of the *patwari's* measurements with scientific data (paragraph 21 below) and (2) the preparation of the *tahsil* and district maps prescribed in S. O. No. 16, paragraph 80. If there are time and money available, the *patwaris* may be instructed to make copies of the index maps to be kept by themselves for use. The Settlement Officer will determine the material on which such copies are to be made.

20. Copies of village map required.—Of the village maps, two or, if necessary, three copies will be made, *viz.* :—

- ✓ (i) for the *tahsil* fair copy (*parat tahsil*) ;
- ✓ (ii) for use in *girdawari* ;
- (iii) for other departments, if necessary (see note to paragraph 8) :—
 - (i) The *tahsil* fair copy should be made on country mapping sheets.
 - (ii) The copy for use in *girdawari* should be on cloth.
 - (iii) The copies made for other departments will be made on the material desired by the department concerned.

Copy No. (i) should be in every respect an exact copy of the mapping sheets filed with the Settlement record.

Copy No. (ii) should also be a close copy. It should show the length of the field boundaries in *karms* and should be coloured, but in the case of large stretches of waste land, the colour should be laid only round the edges of the waste area, and not spread in a wash over the whole.

Copy No. (iii) will be prepared in such manner as is most suitable to the department concerned.

B.—COMPARISON OF VILLAGE MAPS WITH SURVEY DATA.

The instructions in paragraphs 21—25 apply only to estates in which re-measurement is undertaken, but those in paragraph 26 are also applicable to estates in which map correction is substituted for re-measurement.

- (1) *Khakas and the comparison of patwari measurements with the data supplied by the Survey Department.*
- (2) *Comparison of the distances between Trijunction points.*

I.—Where the patwari's measurements are on the square system.

21. See Manual of Land Measurement, paragraphs 72—85. Patwari to submit khaka and statement.—When the *patwari* has completed the laying down of the squares, he will at once send to the Settlement Officer a copy of the rough Index Map (*khaka*), on which he has shown the position of each trijunction pillar and of every station left by the Government of India Survey, in the manner prescribed in paragraph 85 of the Land Measurement Manual and along with it a

statement in the following form showing the distance in *karms* from each trijunction pillar to the next, calculated as the hypotenuse of a right-angled triangle the sides of which are the distances along the sides of the squares :—

Comparison of Distances.

1	2	3	4	5	6	7	8	9	10	11	12
No. of village.	Name of village.	Name of adjoining villages.	Trijunction No.	Distance along sides of squares in <i>karms</i> .		Direct distance in <i>karms</i> by <i>patwari's</i> measurement.	Distance by Imperial Survey data.		Difference in <i>karms</i> between columns 7 and 9, plus or minus.	Difference per cent. to one place of decimal.	REMARKS.
				Base of right-angled triangle.	Perpendicular of right-angled triangle.		In feet or in Gunter's chains or in inches on Revenue Survey map.	The same reduced to <i>karms</i> .			
							Feet.				
20	Muham-madzai.	Kaghazai ..	1—2	576	512	771	4,234	770	+1	.1	
		Nasrat Khel	2—3	855	145	867	4,746	863	+4	.5	
		Banda Mirza Hussain Ali.	3—4	923	393	1,003	5,513	1,002	+1	.1	
		Regi Shinu Khel.	4—5	648	302	715	3,915	712	+3	.4	
		Garhi Mauz Khan.	5—6	864	678	1,098	6,022	1,095	+3	.3	
		Mansur Khel	6—7	607	368	709	3,883	706	+3	.4	
		Independent territory.	7—1	3,009	1,206	3,241	17,797	3,236	+5	.2	

The first seven columns of this statement will be filled up by the *patwari*, the rest being left to be filled up at head-quarters. The distance to be entered in column 7 will be found by extracting the square root of the sum of the squares of the distances entered in columns 5 and 6. No fraction of a *karm* should be entered. This statement will be checked and signed by the *kanungo* and forwarded with the *khaka* to head-quarters. This *khaka* should not contain any details within the village such as *abadi*, roads, wells, ponds, &c. All that need be given are the positions of the trijunctions and any survey stations there may be, and a rough outline of the village boundary prepared by hand from the old map.

22. Check at head-quarters.—On receipt of the statement at head-quarters the Settlement Officer will have the statement completed from the data furnished by the Imperial Survey Department. If the Settlement Officer has been furnished with traverse data he will have entered in column 8 the distance between each pair of trijunction pillars as there given in feet or in Gunter's chains whichever is given in the traverse data. If he has received no traverse data, the scale should be applied to the Revenue Survey map and the number of inches and hundredths of an inch so found entered in column 8. A diagonal scale for inches and hundredths should be used. (Cardboard ones can be obtained cheaply.) In either case the same distance expressed in *karms* should be entered in column 9, and the difference in *karms* and the difference per cent.

worked out; it being stated in each case whether it is plus or minus. In any case in which the difference exceeds one per cent., the *patwari's* calculation of the distances should be checked by comparing it with the distances entered on the *khaka*, and a note of the result of the comparison should be made. The statement will then be placed before the Settlement Officer for his orders. All cases may be passed as correct in which the difference is less than two per cent. in hilly country, or one per cent. in level country, but where the difference is greater than this, an explanation should be called for, unless the distance is a short one. The comparison should be made and orders issued before the measurements of the village are completed.

23. Register at head-quarters.—A register of these comparisons should be maintained by the Settlement Officer, the village being entered in it in the recognised order (*hadd bast*). The form of the register should be the same as that of the statement above prescribed. This register should be filled up for each village as the comparison goes on, the entries being made in pencil until the map has been finally passed by the Settlement Officer when they should be inked in. The distance between each pair of trijunction points will appear twice in the register, viz., in the statement of each of the adjoining villages. These entries should be compared with each other and any serious discrepancy eliminated. When the comparison is completed for each *tahsil*, the number of cases in which the difference is less than one per cent., or more than one, two or three per cent., should be calculated and the results for the district should be given in the Final Settlement Report.

24. Scale of *khaka* and Index Map.—The Revenue Survey maps are generally on the scale of 4 inches = 1 mile, i.e., 240 *kadams* of 5½ feet to the inch, and it will usually be found most convenient to have the *patwari's* final Index map drawn on that scale. The *khaka*, however, can most conveniently be made on a scale a quarter of the size of the scale used in the field map by dividing the side of each square on a sheet into four. The scale on which the *khaka* has been made should in any case be mentioned on it.

II.—Where the *patwari's* measurements are on the triangular system.

25. Procedure prescribed.—As soon as the *patwari* has finished his triangles he will at once send to the Settlement Officer a copy of his *khaka*, as above prescribed, and a statement showing the distances between each pair of trijunction points according to his measurements. The map should be made on the usual mapping sheets ruled into squares, and he will make his *khaka* by reducing the squares proportionally as is done when the measurement itself has been made by squares, noting the distance by scale on the map of each trijunction point from the sides of the nearest square shown on his mapping sheets. He will then calculate out the direct distance between each pair of trijunction pillars as above prescribed, and submit a statement in the form already given.

In all other respects the comparison will be made, and the statement and register completed in the same manner as has been prescribed for measurements made on the square system.

(3)—Comparison of areas.

26. Report and Register prescribed.—Where areas of villages have been calculated by the Imperial Survey Department, they should be communicated to the *tahsildar*, and when the measurements of the village have been completed,

a copy of the *patwari's* final Index Map should be sent to the Settlement Officer with a statement in the following form :—

Comparison of areas.

1	2	3	4	5	6	7	8
No. of village.	Name of village.	AREA IN ACRES.			DIFFERENCE BETWEEN COLUMNS 3 AND 5.		Reasons for difference in all cases in which it exceeds 2 per cent.
		By Imperial survey.	By Patwari's measurement.		In acres, plus or minus.	Per cent. plus or minus.	
			At last Settlement.	Now.			

The Settlement Officer will, on the receipt of this statement, compare the Index Map with the Revenue Survey map (if available) and decide whether to accept the result of the measurements or call for further enquiry. A register in the same form as the statement should be opened and the figures for each village entered in pencil as soon as the statement is received, and inked in when the areas have been finally accepted by the Settlement Officer.

C.—DISTRIBUTION OF PARCHA BOOKS.

(See para. 294 of Manual).

27. Distribution of parcha books when new jamabandi is prepared.—

When a new *jamabandi* has been prepared, based on the entries in the *khataunis*, and the new revenue of each holding has been entered in it the *patwari* will give to each owner, mortgagee with possession and occupancy tenant, a *parcha* book containing a copy of the entries in such *jamabandi* relating to the land held by him, and printed receipt forms for 20 years. The directions governing the distribution of *khataunis* where there are several sharers in a holding (paragrpah (2)) will obtain in this case also. No charge shall be made for these *parcha* books;

APPENDIX VIII.

(SETTLEMENT MANUAL, PARAGRAPH 290.)

Documents included in Standing Records.**A.—SHAJRA-NASH OR GENEALOGICAL TREE OF OWNERS.***Statement of proprietary tenure of village.**Pargana (or Tahsil)**, District.*

STATEMENT OF THE PROPRIETORS.		DETAIL OF COPARCENARY SHARES ABSTRACTED FROM THE KHEWAT.				GENEALOGICAL TREE OF PROPRIETORS.	
Concerning the previous history of the village	Concerning the constitution of the main divisions of the village.	Revenue.	Area of holding.	Share or measure of right.	Reference to khewat holdings.	Names and descent.	Tribes.
					1 2 3 4	<div> <div> <div>..A</div> <div>..B</div> <div>..C</div> <div>..D</div> </div> <div> <div>..Y</div> </div> </div>	
					Total of Taraf		
					5 6 7	<div> <div>..E</div> <div>..F</div> <div>..G</div> </div> <div> <div>..X</div> </div>	
					Total of Taraf		
					8 9 10	<div> <div>..H</div> <div>..I</div> <div>..K</div> </div> <div> <div>..Z</div> </div>	
					Total of Taraf		
					Total of village	Village commonp.	

1. The *shajra-nash* should be drawn on one contiguous sheet, not on separate leaves—on strong paper, similar to that used for the *khasra girdawari*. For strength one inch slips of thin cloth should be pasted on the back of the folds.

2. *Share or measure of right.*—The share or measure of right entered should be that which governs the relation of the holding to the whole village or *taraf*, and according to which the *khewat* is made. In a *bhatachara* village the entry will be "*possession*." The word "*kabza*." should be written only once and not repeated under each holding. If shares prevail, they should be described by the term current among the owners; artificial symbols not so current.

should never be used. All employés and officers will take great care that the shares are not complicated artificially.

8. *Area and Revenue*.—When holdings are owned jointly by several owners whose names do not come together in the *shajra-nash*, the land of these holdings should not be artificially divided in the *shajra-nash*. The whole should be shown against the first name with the word "*minjumla*" prefixed; and against the second name in the column *land* there should be a reference to the previous entry "*entered under holding No.*" The revenue entries should agree with the *jamabandi*. These two columns should not be filled up until the end of measurements. Give the totals of each *patti* or *taraf*; and if a *patti* or *taraf* has common land enter it before those totals. The *khevat* number should be entered in pencil when the *shajra-nash* is first drawn up, and be inked in at the end of measurements at the revenue officer's final attestation.

4. In villages in which a genealogical tree of the owners has been prepared at a previous settlement,—(a) if the table is a small one and can be easily copied, as in the case of small villages or villages of recent foundation, it should be copied out in full and brought up to date so as to be complete in itself; (b) if it is too large to be easily copied it will be enough to file with the new standing record a table showing the last three generations brought up to date. Where no genealogical tree has yet been prepared (1) a complete genealogical table should be prepared going back to the common ancestor in villages where the labour involved in its preparation would be small; but (2) where this would involve great labour, the table should be prepared as follows:—the owners of each *taraf* or *patti* should be brought together, and inside these divisions the men of each tribe or *got*. The ancestors of each existing landowner should be shown for at least three generations back. And if the family has held land in the village for a longer period than this, then the ancestors should be shown for as far back as the memory of the present owners goes and there is no dispute, but usually or not more than six generations.

5. The statements of the proprietors concerning each *patti* or *taraf* and concerning the whole village should be written briefly, and doubtful tales should be excluded. The statement of the proprietors concerning the previous history of the village should be arranged under the following heads:—

- (a) Origin of rights and primary division of the land;
- (b) The foundation of the village, and how named;
- (c) Method of collection of the revenue under former Governments and under British rule.

6. The names of persons who have left no male issue and of widows and daughters should not be entered except for some special reason. Under the names of agnates still living but not in possession, should be entered the words "*out of possession*," and a brief note of where they now live. Mortgagées' names will not be entered.

7. In cases in which a father and a son both own land in separate holdings enter the son's name in the genealogical tree in red ink.

8. If an owner has lost his land (whether by sale or by dilution), but he claims a share in the *shamilat*, note this under his name in the genealogical tree, but no such holding will be shown in the *khatani* or *jamabandi*.

9. If property is divided by wells, add a column showing the "*name of well*" before the "*area*" column.

10. An owner by purchase should be entered on the left of the sub-division *taraf* or *patti* in which he has purchased, a note should be added below his name, showing from whom he has purchased; and if the purchaser has no share in the *shamilat*, this should be stated.

11. When an amended copy of a genealogical tree is drawn up (see Standing Order No. 28, paragraph 48), the columns for 'Area' and 'Revenue' should be omitted. The Statement of the Proprietors should not be re-written, but a reference made to the statement recorded at last Settlement and a note added of any alterations made since the constitution of the village.

B AND C.—JAMABANDI AND LIST OF REVENUE ASSIGNMENTS.

(See Standing Order No. 23.)

NOTE.—In the *jamabandi* which forms part of the standing record, column 7 (field numbers) should be divided into two columns headed respectively "present number" and "former number."

D.—STATEMENT OF RIGHTS IN WELLS.

1	2	3	4	5	6	7	8	9	10	11
Serial No. of well.	No. in map.	Khatwani No.	Name of well.	Depth in feet.		Whether single or double, <i>pakka</i> or <i>kacha</i> , in use or out of use.	Whether at work at last settlement or made subsequently, and in the latter case, in what year it began to be used.	Name and parentage and title of owner, with shares in ownership of well.	Name and parentage and title of persons who use the well, with share of water enjoyed by each.	REMARKS.
				To water.	Of water.					

(1) Ordinary drinking wells need not be entered in this statement; but care is needed that wells which are likely to be used for agriculture are not omitted.

(2) Draw a red circle round the name of every well made since last settlement.

(3) In column No. 11 enter for each well —

- History of well and when built or repaired, and when the present rights in it were acquired.
- Method of working the well, with other irrigation arrangements now in force.
- Mode of distributing the revenue.
- Particulars of exemption from irrigated rates, if any.

E.—WAJIB-UL-ARZ OR VILLAGE ADMINISTRATION PAPER.

1. The statement of customs respecting rights and liabilities on the estate shall be in narrative form; it shall be as brief as the nature of the subject admits, all not be argumentative, but shall be confined to a simple statement of facts.

into paragraphs numbered consecutively, each paragraph describing as nearly as may be separate custom.

2. The statement shall not contain entries relating to matters regulated by law, nor shall customs contrary to justice, equity, or good conscience, or which have been declared to be void by any competent authority, be entered in it. Subject to these restrictions, the statement should contain information on so many of the following matters as are pertinent to the estate :—

- (a) Common land, its cultivation and management, and the enjoyment of the proceeds thereof.
- (b) Rights of grazing on common land.
- (c) Rights to the enjoyment of sayer produce.
- (d) Usages relating to village expenses (*malba*).
- (e) Customs relating to the irrigation of land.
- (f) Customs relating to mills, tanks, streams, or natural drainages.
- (g) Customs of alluvion and diluvion.
- (h) The rights of cultivators of all classes not expressly provided for by law (for instance, rights to trees or manure, and right to plant trees) and their customary liabilities other than rent.
- (i) Customary dues payable to village servants, and the customary service to be rendered by them.
- (j) The rights of Government to any *nazul* property, forests, unclaimed, unoccupied, deserted, or waste lands, quarries, ruins or objects of antiquarian interest, spontaneous products, and other accessory interest in land included within the boundaries of the estate.
- (k) The rights of Government in respect of fish and fisheries in streams, rivers, etc.
- (l) Any other important usage affecting the rights of landowners, cultivators or other persons interested in the estate, not being a usage relating to succession and transfer of landed property.

3. Where the record of rights is being made for the first time, if the persons interested are not agreed as to the existence of any alleged customs the Collector, or an Assistant Collector of the 1st grade shall decide the dispute in the manner provided in section 36 of the Land Revenue Act. Where the record of rights is being revised, the Collector or Assistant Collector of the 1st grade shall similarly decide disputed entries ; but in doing so he shall have regard to the provision of section 37 of the Land Revenue Act.

Tahsildars are authorised finally to attest all undisputed entries in a *Wajib-ul-arz* prepared in accordance with the instructions contained in paragraphs 1 and 2 above, but all entries which at the time of their attestation they find to be disputed should be referred for decision to the Collector or to an Assistant Collector of the first grade.

4. When the statement is complete, the revenue officer aforesaid shall fix a date for its final approval and shall summon the persons interested to appear on that date at a place in or in the immediate vicinity of, the estate to which the statement relates. And on the date and at the place appointed the statement shall be read over in the presence of such of the persons as are in attendance, and after such further correction as may be then found necessary, the revenue officer aforesaid shall sign the statement and shall add at its foot an order declaring that it has been duly attested.*

*For the other documents included in the standing record of an estate see paragraphs 285, 288, 289, 518 and 527 of this Manual. For the *shajra kishwar* or field map see Appendix VII.

APPENDIX IX.

(SETTLEMENT MANUAL, PARAGRAPH 807.)

Village Lists of Rents, Mortgages and Sales.**A.—LIST OF RENTS.**

1	2	3	4	5	6	7	8
No. in this list.	Khasani No.	Names of owner and tenant written short.	Land with detail of soil.	Rent, with rate and amount.	Date when rent was fixed.	Crops grown.	REMARKS.

1. The tenants should be entered in this list in seven groups, viz. —

- (a) Tenants with right of occupancy paying at revenue rates with or without *malikana*.
- (b) Tenants without right of occupancy paying at revenue rates with or without *malikana*.
- (c) Tenants with right of occupancy paying cash rents whether by lump sums or by rents fixed per *bigha*, *kanal* or *ghumao*.
- (d) Tenants without rights of occupancy paying cash rents whether by lump sums or by rents fixed per *bigha*, *kanal*, or *ghumao*.
- (h) Tenants with right of occupancy paying by a share of the produce, or by appraisement, or by cash rates (*sabti*) on crops.
- (w) Tenants without right of occupancy paying by a share of the produce or by appraisement, or by cash rates (*sabti*) on crops.
- (z) Mortgaged land on which the mortgagor has agreed to pay cash rents to the mortgagee.

2. Enter cash rents with care, so as to make it clear whether the rent is paid on the crop or per harvest, or per annum.

3. So also as regards grain rents take care to show any deductions allowed before the owner's share is divided, and any cesses taken by the owner in addition to his share, and whether the owner takes a share of the straw.

4. In column 4 do not detail the fields; only enter the land of each holding with detail of soils.

B.—LIST OF MORTGAGES WITH POSSESSION NOW EXISTING.

Serial No.	Khasani No.	Mortgagor and mortgagee written short.	Land with detail of soil.	Amount of mortgage debt.	Date of mortgage.	REMARKS.

Enter the mortgages in two groups —

(a) Mortgages to members of an agricultural tribe. The Settlement Officer may order that any real agricultural tribe not scheduled under the Punjab Alienation of Land Act, XIII of 1900, shall be included in (a) for the purpose of this statement.

(b) Mortgages to others.

No list of collateral mortgages will be drawn up.

C.—LIST OF SALES SINCE LAST SETTLEMENT.

(Form and arrangement same as above prescribed for list of mortgages.)

APPENDIX X.

(SETTLEMENT MANUAL, PARAGRAPH 824).

Crop Experiments.*

The Director's Circular No. 14, dated 29th September 1898, contains instructions for ascertaining the average yield of the principal crops in certain selected districts. The Director's returns not sufficient. The results obtained from enquiries conducted in accordance with these instructions are valuable so far as they go ; but they do not give information for every district, nor can experiments made on such small areas as are contemplated in the Circular give very reliable data until they have lasted for some years. As it is most important that we should obtain as accurate a knowledge as possible of the average produce of the principal crops in a district the following directions are issued on the subject for the guidance of Settlement Officers.

Main principles.

2. The main principles to be observed will be as follows :—

- ✓(1) Produce experiments must be made every harvest while a settlement is in progress in a district.
- (2) The experiments should be made so that the outturn of the main staples of the district may be ascertained on each class of soil in every assessment circle.
- (3) The fields observed should not ordinarily be of less than an acre ; if observations can be made on larger areas, so much the better.
- (4) The observations should be made only by officers who can be trusted to make the enquiry and report the result in an intelligent manner, and without harassing the owner of the crop observed.
- (5) The result of the experiments should be reported without delay.

3. Soon after the commencement of settlement operations the Settlement Officer should send the Commissioner a statement showing the crops grown in each *tahsil* of the district and the average area occupied by each ; and he should state which crops he considers to be the principal staples, the outturn of which it is important to ascertain. It is unnecessary to have experiments for crops which only occupy a small area ; all that is needed is to find out the average outturn of the principal crops.

4. Some little time before the crops of each harvest are ripe the Settlement Officer should determine the localities where the crop experiments are to be made. Care should be taken that the fields chosen for the experiments are representative of the average of that harvest for each class of soil. To ensure this the Settlement Officer and Extra Assistant Settlement Officer should personally inspect most of the fields selected, the remainder being seen by the Settlement Tahsildar or other senior officer, who can be trusted to see that the crops to be observed are really average ones.

5. In making the experiments the general instructions contained in the Director's Circular above referred to may be observed ; but it will obviously be impossible to ascertain the outturn of large areas in one day. The operations will necessarily be extended over some days. But there is no objection to this, provided that steps are taken

*These instructions reproduce with a few alterations those contained in Settlement Commissioners Circular 11, dated 4th March 1898.

to prevent any of the crop being carried away before its outturn has been ascertained. At the same time everything should be done to make the proceedings as easy as possible to the owners of the crops, and they should be allowed to carry off their produce immediately the results have been recorded.

6. Each experiment should be entrusted to a selected officer. The Settlement Officer should, if possible, keep one experiment for himself, and the Extra Assistant Settlement Officer and other gazetted officers, if any, should also be associated in the work. The report of each experiment should be made in the form annexed, A, which is the same with a slight addition as the form prescribed by the Director. When all reports have been received they should be brought together into English registers to be kept by *tahsils* in the same form. The experiments should be entered in the registers according to (a) assessment circles, (b) crops, (c) classes of land. Thus all *chahi* crops in the Bangar Assessment Circle will be grouped together. The Settlement Officer should go over them carefully and note in the last column if he considers them trustworthy or not. If the experiments have been vitiated by some radical mistake, or if the crop is such as the *patwari* ought to describe in whole or part as *kharaba*, they should be cancelled by a large cross in red ink being drawn over them, the reason for the rejection being recorded. The totals of all accepted experiments for each crop on each class of land will be shown in columns 10-12 and the average yields in columns 13-14 in red ink. The averages will be calculated not from the averages of individual experiments, but from the total outturn of all experiments with that crop on each soil. The registers should then be sent to the Commissioner for perusal with a brief report of the character of the harvest and the results of the experiments. The report for the *rabi* harvest should be submitted by the end of June and for the *kharif* harvest not later than January. The Commissioner will forward them with his remarks to the Director of Land Records. The registers will be returned after inspection.

7. The results of each harvest's accepted experiments should be written up in a general Register for the District in Form B annexed. Separate pages will be kept for each crop to be experimented on. The form annexed is a specimen for the wheat experiments. The entries in Register B for each harvest will correspond with the red ink entries in Register A for the same harvest.

A.—STATEMENT OF RESULTS OF CROP EXPERIMENTS FOR—SEASON 19

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Serial No.	Assessment Circle.	Village.	Kind of crop.	Class of soil and irrigation.	Status and resources of cultivator.	Detail of cultivation in three preceding seasons.	Detail of village manuring and watering for present crop.	Name and rank of officer and date of making the experiment.	Area cut.	WEIGHT OF PRODUCE.		PRODUCE PER ACRE.		REMARKS.
										Grain.	Straw.	Grain.	Straw.	

NOTE.—In column 5 enter the class of irrigation of the crop experimented upon according to *girdawari*. In column 6 state whether the cultivator is a man of good, average or insufficient resources as regards cattle, labour, etc., extent of his holdings, whether indebted or not, also his caste if considered relevant.

APPENDIX XI.

(SETTLEMENT MANUAL, PARAGRAPH 383.)

Instructions issued by Colonel E. C. Wace, when Settlement Commissioner, as to enquiry into prices.

PRICES—COLONEL WACE'S INSTRUCTIONS.

Settlement Commissioner's Circular 74 of 1879, paragraph 2.—The enquiry should be based on three different sources of information—

- (a) the prices reported fortnightly in the Gazette ;
- (b) the trade prices of the principal marts in the district ;
- (c) the prices at which the agriculturists make over their produce at harvest time to the village *banias*.

3. . . . The duty of ascertaining the trade prices of the principal marts for the past twenty years should be made over to the Extra Assistant Settlement Officer. He should select with your approval the largest trading town or towns in each *tahsil*, and ascertain the prices on twelve dates in each year by personal inspection of the books of the principal dealers. . . . The prices recorded should be those at which the trader sold the produce to other traders, not those at which they purchased from agriculturists.

4. The third division of the enquiry, *viz.*, the prices realized by agriculturists, should be entrusted to the Superintendents. . . . Three or four large villages should be selected in each *tahsil* by the Superintendent in consultation with yourself. . . . in the districts in which I have worked there were two dates on which the agriculturists' accounts were usually settled, *viz.*, . . . after the *rabî* harvest, and . . . after the *kharif* harvest. If accounts were not settled on that date nevertheless the produce of the past harvest was usually credited at the prices prevailing on those dates. The Superintendent's enquiry should be directed to ascertain the prices at which in each year the village traders took over the produce from the agriculturists after each harvest, and, if any customary dates . . . are observed in the adjustment of such accounts, they will be a useful guide. The Superintendent should be warned not to assume the harvest prices hurriedly, but in each instance to compare a number of accounts.

5. The Superintendent should be directed at the same time to ascertain and report the rate of interest usually charged by the village traders against agriculturists in their current accounts, and also the terms on which advances for seed are made, and whether the majority of the agriculturists usually require such advances or not.

6. With the result of these enquiries for each *tahsil* before you, you can form an opinion (1) as to the extent to which prices generally differ in the various parts of the districts, (2) the extent to which the prices realized by agriculturists fall short of the trade prices and of the average annual prices, (3) the extent to which the prices realized by agriculturists have improved during the past 30 years, (4) the prices which can properly be assumed in your produce estimates.

7. As far as my experience goes it is not convenient to consider these prices separately for each *tahsil*, a fairer and sounder view of the subject is obtained by considering at one time the results for the whole district. . . .

(Accordingly a preliminary report on prices for the whole district was ordered.)

9. It is not intended that our enquiries should be limited strictly to 20 years. On the contrary it is most necessary that they should extend back to the period at which the expired settlement was made, and that we should compare the average prices that we now propose to assume with the average prices of that period

APPENDIX XII.

(SETTLEMENT MANUAL, PARAGRAPH 315).

Form for one-fourth net assets estimate based on Batai and Zabti rents.

Assessment Circle.	Class of land or soil.	CROPS OF WHICH THE PRODUCE IS DIVIDED.										ZABTI CROPS.				TOTAL CROPS.			
		Kharif harvest.		Rabi harvest.		Total of both harvests.		Detail.		Cane.		Kharif harvest.		Rabi harvest.		Total of both harvests.		Detail.	
Bungar.	Chalk.	Maize.		Wheat.		Total crops.		Acres.		Rent rate		Acres.		Government share.		Total crops.		Government share.	
		Total crops.		Total crops.		Total of both harvests.		Total rent		Government one-fourth share.		Rate per acre harvested.		Rate per acre harvested.		Total of both harvests.		Rate per acre harvested.	
		Detail.		Detail.		Detail.		Detail.		Detail.		Detail.		Detail.		Detail.		Detail.	
		Yield per acre in seers.		Yield per acre in maunds.		Yield per acre in annas per maund.		Value of total grain produce, Rs.		Value of straw gross produce, Rs.		Government share at—per cent.		Government share at—per cent.		Government share at—per cent.		Government share at—per cent.	
		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.		Rate per acre harvested.	

Note.—Complete the estimate for the circle by making similar entries for each class of land or soil for which a separate revenue rate will be framed, and adding up the total for all classes of land or soils. Also total the estimate for the whole tract under report without detail of soils. Alterations in or additions to the details in column 3 may be necessitated by local custom or practice relative to payment of the dues of menials and artisans, canal rates, landlords' share of straw, etc. In any case the value of the total gross produce of grain and straw should be worked out and entered. See also part (c) of the rules framed under section 60 of the Land Revenue Act.

APPENDIX XIII.

(SETTLEMENT MANUAL, PARAGRAPH 118)

Heads for a Comparative Survey of the Resources of different tracts.

1. Areas cultivated and uncultivated—
 - (a) Percentage cultivated to total area.
 - (b) Percentage uncultivated to total area.
 - (c) Increase per cent. in cultivation since previous settlement.
2. Irrigation—
 - (a) Percentage cultivated land irrigated from wells.
 - (b) Increase per cent. of wells since last settlement.
 - (c) Average depth of wells to water, in feet.
 - (d) Average *chahi* areas per well.
 - (e) Average acres of *chahi* crops per well.
3. Crops—
 - (a) Average crops harvested, per cent. of cultivated area.
 - (b) Percentage of wheat and other crops in such detail as may appear necessary.
 - (c) Percentage of area failed to area sown (with detail of irrigated and unirrigated if necessary).
4. Population, owners, and tenants—
 - (a) Population per square mile of cultivation.
 - (b) Average number of cultivated acres per owner.
 - (c) Prevailing tribes of landowners.
 - (d) Percentage of area tilled by owners.
 - (e) Percentage of area tilled by occupancy tenants.
 - (f) Percentage of area tilled by tenants-at-will on kind rents.
 - (g) Percentage of area tilled by tenants-at-will on cash rents.
5. Transfers—
 - (a) Percentage of total area sold since previous settlement.
 - (b) Percentage of above sold to money-lenders.
 - (c) Average price per cultivated acre of land sold from 18 to 19
 - (d) Percentage of cultivated area now under mortgage.
 - (e) Percentage of above mortgaged to money-lenders.
 - (f) Average mortgage money per cultivated acre of land mortgaged from 18 to 19 .
6. One-fourth net assets—
 - (a) One-fourth net assets share of gross produce.. { (1) Irrigated.
(2) Unirrigated.
 - (b) One-fourth net assets rates .. { (1) *Chahi*.
(2) *Barani*.
7. Assessment—
 - (a) Assessment rates — { (1) *Chahi*.
(2) *Barani*.
 - (b) Resulting assessment { (1) Percentage of value of gross produce.
(2) Percentage of one-fourth net assets.
 - (c) Increase per cent. as compared with previous assessment.

APPENDIX XIV.

(SETTLEMENT MANUAL, PARAGRAPH, 242).

Killabandi.

1. The procedure known as *killabandi* may be defined as the substitution of rectangular fields of the uniform size of one *killar*

What *killabandi* means. each for the irregular fields, some minute, others inconveniently large and all of haphazard shape, into which the lands of a village are ordinarily found to be divided. The actual size of the *killar* is of minor importance, and it differs according to the size of the square or rectangle of which it is always the twenty-fifth part.

An account of the early history of *killabandi*, as applied to areas of Government waste on the introduction of canal irrigation, will be found in paragraphs 808—814 of the Colony Manual. As originally devised, *killabandi* was to be applied to waste areas only. It was soon perceived, however, that it might, with advantage, be extended to cultivated lands where canal-irrigation was beginning. The Irrigation Department found that the division of the irrigated into rectangular plots of uniform size made the distribution of water easier, fairer and more economical. It was accordingly decided to introduce the system into old proprietary villages wherever possible, and the success attained by the introduction of *killabandi* into these villages has led Government to make its adoption a condition of irrigation from a perennial canal.

2. It is obvious that *killabandi* in Crown waste is entirely different from *killabandi* in proprietary villages. In Crown waste it simply means drawing lines of demarcation on a *tabula rasa*, and thus dividing large areas into suitable units of allotment and cultivation. The method in this case is to divide each side of a square or rectangle into five equal lengths and join the points thus fixed by lines parallel to the sides of the rectangle.

In proprietary estates *killabandi* involves a complete repartition of the estate. It is with this form of *killabandi* that the present appendix is concerned.

3. The square adopted in the Chenab Colony measured 27·7 acres, and was divided by Lieutenant-Colonel F. Popham Young into 25 *killas* of 8 *kanals* 18 *marlas* each. The rectangle at present prescribed measures 1,100 × 990 feet, and is sub-divided into 25 *killas* of exactly one acre apiece, measuring 220 feet from east to west and 198 feet from north to south. The superiority of this rectangle over the square is obvious.

4. The great value of *killabandi* lies in its economic advantages. With straight water-courses and even-shaped fields there is much greater convenience and much less waste in the use of water. There is great saving of time in the *girdawari*, and the same staff of supervising officers can in the same time enforce a far-better supervision of the work than under the old system. But above all the expense and worry of subsequent settlements is greatly reduced. There is no reason at all why a chess board map should not be kept up to date with perfect ease. The map once made is practically permanent, and revision of the map, with all its attendant inconvenience and expense, should disappear as an incident of re-settlement operations.

There are other advantages in *killabandi* which are numerous and soon patent even to the most conservative of *zamindars*. In the first place, once the chess board is laid out there is an end to all disputes as to the boundaries between fields. Encroachments beyond the line of the adjacent *killas* are immediately detected and proclaim their own condemnation. Similarly the scope for boundary disputes between adjacent estates is narrowed down, and even where the

boundary runs from point to point instead of along the sides of *killas*, the correct alignment is very easily ascertained from the map and understood by all parties concerned. In the next place it becomes very much easier for the people to manage their own affairs without reference to the revenue officials, and the opportunity for extortion on the part of corrupt members of the staff is very greatly diminished. For example, once the land is divided into rectangular fields of a uniform size the people can easily manage their own partitions. All that is needed is a piece of string to measure with and an agreement as to the quality of the land under partition. Similarly the adjustment of cash rents is greatly facilitated while the widow and the absentee can readily understand the management of their estates and need no longer be defrauded by their tenants. In the same way where land revenue and occupier's rates are recovered under a fluctuating system the assessee can at once check the charges demanded from him, however, deficient his education, and cannot be imposed upon by a corrupt official.

5. At the start it was a difficult matter to persuade the owners of old established proprietary estates to change their hereditary holdings and system of cultivation. This has, however, been completed with success in Shahpur, throughout the Gujranwala district, in the canal irrigated areas of Sialkot, Gujrat and Montgomery and is now (1929) being carried out in certain parts of the Ferozepore and Lahore districts. Where irrigation is being extended for the first time it is now the policy of Government to insist on *killabandi* as a condition of irrigation, and this policy is justified by the success of *killabandi* in Gujranwala and by the satisfaction with which the people have accepted it. Elsewhere it is not possible to insist upon the change, nor if possible would it ordinarily be desirable. Where for example the population is heavy, land valuable and holdings small, the amount of dislocation caused by the change would outweigh its ultimate advantages in the eyes of the people. For this reason the attempt to introduce the system by consent in Karnal had to be abandoned. It is, however, possible that even in unirrigated estates, where holdings are large and land less valuable, owners will in time become so convinced of its advantages as to adopt the changes voluntarily.

6. The first step is to assemble all the owners and in the case of absentees to give them a date, by personal service or the issue of a proclamation, within which their objections to the proposed change will be heard. The advantages of *killabandi* are explained to them, and if there is a question of extending canal irrigation, the results of a refusal are pointed out. If they agree to *killabandi* mutation is involved by which the whole lands of the village are declared to be *shamilat*, and the method by which the re-partition is to be carried out is discussed and recorded for the orders of the officer in charge of the operations. Provision should be made for straightening the roads and boundaries, for dealing with trees that may be standing on the land in the event of its transfer to another holding and for the treatment of wells and valuable land near the *abadi*. The people may decide to exclude the former from *killabandi* altogether, and they may wish to divide the latter into smaller units than a whole *killa*. There is no objection in such a case to the use of the $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ *killa*, and the same sub-divisions may have to be employed at the end of the process in order to adjust the total holdings of individuals to the amount of land they originally held. It should also be ascertained whether the owners of joint holdings wish to take the opportunity of dividing their lands or to remain joint. Efforts should be made to cause the least disturbance of existing holdings possible, and unless the people especially desire it, no attempt should be made to amalgamate holdings scattered in different parts of the estate. These often owe their origin to inequalities of soil, and provision

should always be made for owners to receive not only the amount of land they originally held, but the same amounts of each important class of land.

7. As soon as the owners have agreed to *killabandi* and the method thereof, a mutation should be written up and decided to declare The same. all the lands of the estate to be "*shamilat*." In this mutation it is sufficient in column 4 (ownership) and 5 (cultivation) to enter "See detailed *jamabandi* of (latest) year," and in column 6 (details of fields) to write the total number of fields and total area. In column 9 (new ownership) will be entered "*shamilat deh*" according to $\frac{\text{measures of possession}}{\text{shares}}$ entered in the last *jamabandi*.

The naib tahsildar's order will refer to the agreement of the owners to make the whole area *shamilat* on the *killabandi* file and will sanction the mutation. The class will be "*ishtimal for killabandi*," and under the Financial Commissioner's orders no fee will be charged. The method of partition must be sanctioned by an Assistant Collector of the 1st grade,—(*vide* section 126 of the Land Revenue Act).

8. *Killas* need not be made on any unculturable land or in culturable land which the owners do not yet intend to bring under the Detailed instructions. plough. In the former case the rectangles need not to be sub-divided on the map; in the latter it should be sub-divided on the map by broken lines and treated as broken up for the purpose of partition if the land is not to remain *shamilat*, though the actual demarcation will only be done when it comes under the plough.

Masaris are provided ready ruled into *killas*, but except for plotting on them those natural features such as roads, village sites, ponds, wells and other such things whose boundaries do not conform to the *killa* plots made on the ground, these maps are left untouched until partition is effected. As *killabandi* proceeds, however, each rectangle corner must be carefully plotted on the old map. If the old map was made on the square system it will be sufficient to show the *killas* by first drawing the rectangle and then sub-dividing it into 25 equal parts by means of the scale, care being taken to distribute any inequalities brought out by the scale on the map in the same way as is done with errors found on the ground by the chain. If, however, the old map was made by any other system of measurement, correct results will not be attained by mere scale work. In this case each corner of each *killa* must be plotted on the map, and lines then drawn between them. The result will be a most irregular series of rhomboids and polygons, but will give a correct indication of what existing fields or parts thereof are included in each *killa*. As the object of this work on the old map is simply to facilitate partition it may be omitted in cases where the village is owned by a single person or by several joint holders, provided there are no mortgages, occupancy tenants or subordinate owners whose individual holdings have to be considered in partition. Where there are several individual owners or subordinate tenures but the land is held in large blocks, it will often be found possible to limit this part of the work to the boundary line where these several blocks meet, or to that part of the village in which such complications exist.

9. It frequently happens that the sides of a rectangle are not exactly the prescribed length. Where the error is of 2 *karams* or less, four of the five sections should be of the usual area, the deficiency being all in the fifth. Where the error is more than 2 *karams*, it should be distributed evenly over the five sections. The points are then

joined by lines drawn parallel to the sides of the rectangle and pegs fixed into the ground wherever these lines intersect. The process of marking out the *killas* on the ground is then complete.

10. When *killabandi* has been completed on the ground, the first step is to straighten out as far as possible roads and village boundaries. The question of roads is for early decision, as they will of course affect the areas of the *killas* they pass through. No attempt should be made to force roads along the angle of a *killa* or rectangle. Roads should be as direct as it is possible to make them, through when straight it is an advantage to have them along *killa* boundaries.

11. The *killas* will now be shown on the old map and the work of re-distribution will begin. The rectangles are numbered serially and the *killas* in each rectangle should be numbered separately from 1 to 25 as directed in paragraph 804 of the Colony Manual.

12. The guiding principle of the partition is that the least disturbance possible should be caused to owners and tenants, and for this reason the *killa* is given to the man who hitherto owned the most land in it. This explains the importance of showing the *killa* on the old map. It is, however, necessary in some cases to depart from this rule in order to make the various owners' shares correct, and for the same reason half or smaller fractions of a *killa* have at times to be employed in distribution.

It is unnecessary to show the *karams* on the map except where the side of a *killa* is broken up or where any number (such as a tank, etc.) cannot conform to the *killa*, and similarly it is unnecessary to calculate the area of any whole *killa* in the field book. It is sufficient to write the word '*salim*' and the already known area of one *killa*. The corner stones of the rectangles should be clearly shown on the map. The *girdawar* must show each shareholder the *killas* allotted to him on the ground, and so far as possible this should be done by the *naib-tahsildar* at his attestation also.

13. When the records and final attestation are all complete and objections disposed of, the *killabandi* partition mutation will be written up and sanctioned. This is a most important document. In column 4 the entry will be "*shamilat deh*" followed by the names and shares of all the owners of each holding in the last *jamabandi*. In this column the total of each old holding will be shown with details of kind of soil but without field numbers. Entries in column 5 are only required in case of occupancy tenants or mortgagees and purchasers of special fields out of the holding. In column 6 should be entered the total number of fields and total area of the holding from the last *jamabandi*. The entries in columns 8 to 12 are copies of the *killabandi khataunis*.

Necessary alterations of any kind must be made in red ink and new words or figures clearly written and initialled by the attesting officer.

14. Any alteration in area that is caused by straightening the boundaries is dealt with in a separate mutation order, one sufficing for all the boundary lines adjusted in each estate. The area lost and gained is shown in separate columns, details being given of the estates at whose expense each gain has occurred or to which any area has been surrendered. No fees are charged.

15. The attestation order will be in detail and will recount all the objections raised before the naib tahsildar and his method of dealing with each. All increases or decreases of area exceeding a quarter of a *killa* or 2 *kanals* in any *khata* should be noticed, and it should be specified that the attention of the parties were called to them, and either that no objection was raised, or in what way the objection was explained and met. The names of owners present will be carefully recorded and their thumb marks taken. The mutation will be designated a partition based on *killabandi* and no fees will be recovered. At the end of the mutation order a statement of loss and gain will be entered in the following form:—

1	2	3	4	5	6	7	8	9	10	11	12	13
No. of holding in last <i>jamabandi</i> .	Names of owners abbreviated.	Total area.	Share in <i>khata</i> .	Area according to share.	To be reduced (on account of decrease in area of village).	To be added (on account of increase in area of village or division of waste).	Area due.	Number of present holding.	Area.	+	-	REMARKS.

If any exchanges have taken place between notified and non-notified tribes through the re-arrangement of holdings, attention must be called to the fact in a final note and the mutation forwarded for sanction of the Deputy Commissioner under the Alienation of Land Act, XIII of 1900. For this purpose it is convenient to give the Collector in charge of *killabandi* operations the powers of a Deputy Commissioner under the Act.

16. When the *killabandi* of the whole number of villages to be repartitioned is complete the trijunction pillars should be examined and, where necessary, moved to their new positions, an index map showing accurately the former and new positions of all pillars so moved being forwarded for information to the Superintendent, Northern India Survey.

APPENDIX XV.

(SETTLEMENT MANUAL, PARAGRAPH 461.)

Instructions regarding assessment of urban lands and of lands which may become urban.

1. All lands in a military cantonment and all village and town sites of ancient standing will be exempt from assessment in the absence of special orders and if exempt heretofore.

2. Land in a civil station will not ordinarily be exempt,* but application for exemption on special grounds, or in the interest of a municipality, may be submitted through the Settlement Officers for the orders of Government.

3. Lands, such as roads and sites of hospitals, dispensaries and schools and the like, which yield no return to private individuals or local bodies and are devoted to public purposes, may, so long as they are utilized for the purposes of the character indicated, be exempted from assessment of land revenue, whatever the amount of the land revenue assessed or assessable on those lands may be.† All cases in which it is intended to exempt land from assessment under this ruling should be referred for the orders of the Financial Commissioner.

4. Lands taken up by a municipality for markets, cart-stands and similar objects, from which an income is raised, should contribute their share of land revenue.‡

5. Municipalities have no claim to the assignment of the land revenue assessed upon lands within their limits, which, like all land revenue, is a Government asset. No such alienation of this revenue to municipalities should be made.§

6. In assessing lands in a civil station, Settlement Officers will be guided by the following rules:—

- (a) Land cultivated with a view to sale of produce, such as market gardens, corn-fields, is to be assessed in the ordinary way on a share of the produce.
- (b) Lands attached to dwelling-houses or shops, in which is included compound or garden land, not of the nature of market gardens, to be assessed according to the usual rate, for the description of soil of the land in question, provided, first, that, if such rate gives a smaller sum than that hitherto paid, the old assessment shall be maintained, and, secondly, that the assessment shall always be payable by the proprietor of the land; and, where the amount demandable on one property is less than one rupee, it may be remitted at the discretion of the Settlement Officer. The same rule and exemptions to apply to the assessment of land occupied by public gardens or public buildings, not the property of Government.
- (c) Lands owned by the State, *e.g.*, reserved plots of waste land attached to Government buildings, etc., to be exempt from assessment. Where, however, under the practice of the province, town lands are assessed to land revenue, Government property in any town or station consisting merely of isolated plots, the area of which is inconsiderable,

*Government of India, Finance and Commerce, Resolution No. 2128, dated 31st December 1879, paragraph 1.

†Government of India, Revenue and Agriculture, Circular No. 8-277-2, dated 2nd August 1911 (Punjab Government No. 1899-S., dated 1st September 1911).

‡Government of India, Revenue and Agriculture, No. 613, dated 7th May 1904.

§Government of India, Finance and Commerce, No. 2128, dated 31st December 1879, paragraph 2.

should ordinarily form no exception, even though sold outright by Government.*

7. With reference to the Land Revenue Act land under buildings may be divided into three main classes—

I.—Village and town sites of ancient standing, which have always been revenue-free.

II.—Land assessed to land revenue as being arable or pastoral which has been—

(a) absorbed in an old revenue-free village or town site, or

(b) built over, though lying at a distance from any village or town.

III.—Land which has been sold by Government for the express purpose of being made use of for a town or village or a factory or other building.

No assessment will be imposed on land of the first class (paragraph 1)†.

8. As regards land of the second class, the mere conversion of arable into building land at the will of its owner, and probably to his advantage, is no reason for remitting its land revenue. Where the land is merely absorbed in the village site, the revenue may fairly continue to be realized, and may at the next settlement be raised to the same pitch as the assessment of arable land in the neighbourhood. Where it has been sold at a profit, *e. g.*, to be a factory site, whether adjoining the village site or at a distance from it, then the revenue may justifiably be raised at the next settlement to an amount equal to 2, 3 or 4 per cent., on the price paid for the land, and at subsequent settlements the revenue may be further raised in proportion to the rise ascertained in the price of land generally. But it will not be justifiable to take into account under the Land Revenue Act the profits made by the factory-owner which are due not to the land, but to the use of his capital and his machinery. On the other hand, the considerations which ordinarily operate to prevent the imposition of a full land revenue, such as small holdings, and the objection to a large *per saltum* increase, are not applicable in such cases, and it will be right to take the equivalent of the highest assessment rates of arable land, or even the full one-fourth asset rates arrived at in the produce estimate. In small villages where land in the village site is of little value, it is scarcely worth while to maintain the assessment of land absorbed in it, and the present practice may be maintained of remitting the revenue and measuring the whole village site in one *khassra* number.

9. With land of class III Government has a free hand, and may stipulate at the time of sale that the purchaser and his representatives in interest shall be liable to make an annual payment to the State—whether it is called land revenue or ground rent or anything else matters little—which shall be liable to revision from time to time. The letting value of a site, apart from the building, is hard to determine, but the definition in Punjab Government letter No. 448, dated 24th March 1869, may be followed, *i. e.*, "that portion of the net rent which exceeds a fair remuneration for the capital invested in building the house." Or it may be simpler to take 2, 3 or 4 per cent. on the original price to start with, and to judge the increase in the value of the site from time to time by comparison with the selling price of land, arable or urban, in the neighbourhood, and to enhance the ground rent to 2, 3 or 4 per cent. on the increased value so gauged.

* Government of India, Revenue and Agriculture, Resolution No. 21-223-12, dated 7th October 1895.

† Paragraphs 7—9 are based on correspondence ending with Punjab Government No. 154, dated 10th October 1912.

In the case of new towns, the first reassessment of ground rent may be fixed for five years after sale, and subsequent reassessments may be at intervals of ten years.

10. The redemption of land revenue assessed on lands taken up by a municipality for a public or quasi-public purpose is contrary to the policy of the Government of India, and is not permitted.* If, however, a Settlement Officer thinks that owners of urban land of the second and third classes described above are likely to welcome redemption of the revenue, he may include proposals to that end in his assessment report.

11. When estates are assessed purely to fluctuating crop rates, and there is no fixed assessment, a clause is to be added at settlement providing for the imposition of a fixed assessment on any area converted during the currency of settlement into a building site, the fixed assessment to be leviable at the highest rate per harvest sanctioned for the assessment circle to which it belongs.

*Government of India, Revenue and Agriculture, No. 613, dated 7th May 1904.

APPENDIX XVI.

(SETTLEMENT MANUAL, PARAGRAPH 517.)

Scheme for Contents of Assessment Reports.

An outline of the contents of an assessment report is given below. It is impossible to fix a limit of length, but it may be observed that a clear and good report has on occasion been comprised within 80 pages of print, and it should rarely be necessary materially to exceed 40 pages:—

1. PHYSICAL FEATURES—

- (a) Brief general description of the tract.
- (b) Account of the amount and monthly distribution of the rainfall.
- (c) Reference to the orders passed regarding the division of the *tahsil* into assessment circles and the classification of soils.

2. FISCAL HISTORY—

- (a) Political history may be noticed in the briefest possible way, nothing being inserted except what is required to make the fiscal history intelligible.
- (b) Fiscal arrangements of the rulers who immediately preceded us and the settlements before that under revision may be dealt with very shortly.
- (c) The expiring settlement will need fuller treatment. It will be requisite to notice the manner in which the rates were framed, the general pitch of the assessment, the fairness or otherwise of its distribution over estates and the care or difficulty with which it has been collected. A table should be given showing under proper heads the alterations in the demand which have occurred since its introduction. The causes of any important revisions or reductions found necessary during the currency of the settlement should be specially noted.

3. GENERAL STATISTICS—

The amount of information to be given under this head will vary much in different districts. The following are among the more important subjects to be noticed:—

- (a) Cultivated area at different periods, with details of classes of land and means of irrigation. Where the area under report includes lands leased from Government, the statistics regarding such lands should be either entirely excluded from the assessment report, or should be kept separate in the returns from the statistics relating to proprietary lands. The character of the new cultivation as compared with the old should be stated.
- (b) Changes in the prices of agricultural produce and in the cost of production since last settlement. The cost of well-irrigation should be noticed.
- (c) Communications and markets.
- (d) Cattle used in agriculture and kept for dairy purposes.
- (e) Population, and especially rural population, at different periods, with its incidence on the cultivated area.

- (f) Tribal distribution of the rural population, and especially of the land-owners, with a note of the character as agriculturists of the principal classes of landlords and tenants.
- (g) Prevailing tenures and normal size of proprietary holdings in different circles and tribes.
- (h) Statistics of transfers at various periods (1) as throwing light on the value of agricultural land, (2) as evidence of the extent of indebtedness, especially to money-lenders. If many of the land-owners derive an income from sources unconnected with agriculture, this should be stated.

4. CROPS—

- (a) The crop statistics should be examined with special reference to the fluctuations in the sowings and in the proportion of crops harvested to crops sown from year to year.
- (b) The general system of cultivation followed in the case of different classes of land should be noticed.
- (c) Tables showing chief crops which were harvested in each circle and the area of failure without crop details may be given. The areas should be the average areas of a series of years, and they can most conveniently be exhibited in percentage of the total area harvested.
- (d) The figures given in these tables may be briefly compared with those for neighbouring tracts of the same character, so as to afford some test of the comparative incidence of the assessment.
- (e) Important changes in cropping since the previous settlement should be noticed.

5. TENANCIES AND RENTS—

- (a) Areas cultivated by owners, occupancy tenants and tenants-at-will.
- (b) *Batai* and *zabti* rents paid by tenants-at-will.
- (c) *Chakota* rents paid by tenants-at-will.
- (d) Cash rents paid by tenants-at-will.

6. ONE-FOURTH ASSETS ESTIMATES AND DEDUCED STANDARD RATES—

- (a) One-fourth assets estimates based on *batai* and *zabti* rents—
 - (1) Average area of crops.
 - (2) Yield of crops assumed, with notice of means adopted to arrive at a fair estimate.
 - (3) Prices assumed. A very brief summary may be given of the information furnished in the report on prices and of the orders passed upon it.
 - (4) Calculation of owner's true share of produce after deduction of dues paid to menials, etc., and of the one-fourth assets share.
 - (5) Standard one-fourth assets rates based on *batai* and *zabti* rents.
- (b) One-fourth assets estimate based on *chakota* rents. An estimate may be framed if fixed grain rents are sufficiently numerous to make it worth while to do so.

(e) One-fourth assets estimate based on cash rents—

- (1) The method by which this estimate is framed should be noticed, the measures, if any, taken to eliminate abnormal rents being carefully explained. A comparison should be made of the incidences of the old and new assessments in the manner laid down in rule 81 of the rules framed under section 60 of the Land Revenue Act to see that the increase does not exceed the limit laid down in section 51 (8) of that Act.
- (2) The standard one-fourth assets rates deduced from cash rent data should be compared with those based on *batai* and *zabti* rents, and large discrepancies explained as far as possible.
- (d) True one-fourth net assets arrived at by comparison of (a), (b) and (c) and on general considerations.

7. REVENUE RATES AND FINANCIAL RESULTS—

- (a) The existing revenue rates and demand should be stated and compared with the standard one-fourth assets rates deduced from rents and the demand obtained by their application to the cultivated area of each class of land.
- (b) The general reasons bearing on the question of the enhancement to be taken or the relief to be given should be noticed, and, if it is not proposed to assess up to one-fourth net assets, the grounds for deviating from that standard should be fully explained.
- (c) The rates proposed for each circle, and the reasons by which they are justified, should be stated. It is generally convenient to discuss the assessment of each circle separately.
- (d) Cesses, old and new, should be mentioned.
- (e) A table should be given comparing the original demand of the expiring settlement, the demand for the last year of its currency and the new demand. The percentage of increase taken should be stated.

8. OTHER MATTERS—

- (a) If it is proposed to resort to deferred assessments, the extent to which they will be adopted should be noticed.
- (b) The term of settlement, which is considered suitable, should be noted. This will not be finally decided till orders are passed on the settlement report. But it is necessary that a provisional decision should be made, as the amount of enhancement to be taken may partly depend on the period during which the State will debar itself from claiming any further increase.

APPENDIX XVII.

1 (SETTLEMENT MANUAL, PARAGRAPH 9224,

A. —Detailed village assessment statement of fixed land revenue.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26							
Assessment Circle.		Khatas, shared, or jagir.	Serial No.	Estate.	AREA IN ACRES AND WELLS.										REVENUE IN RUPEES.										REMARKS.							
					UNCULTIVATED OTHER THAN FORESTS. Available for cultivation. Unappropriated Government waste. Other.										CULTIVATED AREA, WITH DETAIL OF SOILS. Chahi. Nahri. Ahi. Satala. Barani. Total cultivation. Number of wells:										LAST ASSESSMENT.		ESTIMATED NEW DEMAND BY SANCTIONED ASSESSMENT RATES.		Proposed assessment and rate per acre of culti-		VARIATION PER CENT. OF NEW DEMAND (COLUMN 23) ON OLD DEMAND (COLUMN 19).	
					Total area.	Forests.											Last year's demand.	By rates.	Add assessment on account of miscellaneous assets.	Total.	Proposed assessment and rate per acre of culti-	Version (column 15).	Increase.	Decrease.								

NOTE.—Columns 3-4.—Villages will always be arranged by assessment circles, and inside these circles topographically.
 6-15.—The entries of area and well- will be given throughout for last settlement in red ink, and for new settlement in black.
 10-15.—These may be altered as necessary to suit the circumstances of different districts.
 17-23.—The revenue in each case will be the gross assessment, including assignments of all kinds.
 26.—Explaining reasons in all cases in which existing assessment is reduced, or in which the new demand differs by more than 20 per cent. from the demand by sanctioned rates.

B.—Detailed village assessment statement of fluctuating land revenue.

[illegible]

NOTE.—Columns 3—4.—Villages should be arranged by assessment circles, and inside those circles topographically.

5-26.—There may be altered as necessary to suit the circumstances of different districts.

3—26.—There may be altered as necessary to suit the circumstances of different districts.
9—12 and 23—26.—The revenue in each case will be the gross assessment, including assignments of all kinds.

29.—Explaining reasons in all cases in which existing assessment is reduced, or in which the new demand differs by more than 20 per cent. from the demand by sanctioned rates,

APPENDIX XVIII.

(SETTLEMENT MANUAL, PARAGRAPH 546.)

Incorporation of New Assessments into District Land Revenue Roll-

The Settlement Officer must prepare the following statements, for which forms are given below. They are forwarded by the Settlement Officer to the Commissioner who, after checking them in his office with the detailed village assessment statement, forwards them to the Financial Commissioner for record in his office. The Financial Commissioner will not sanction the new land revenue roll till they are received :—

- (a) comparative demand statement showing the fixed assessment of each estate for the last year of the expired settlement, and for the first year of the new settlement ;
- (b) progressive and deferred assessments claimable in future years ;
- (c) comparative abstract of the fixed revenue roll of the district for the last year of the expiring, and the first year of the new, assessment ; and
- (d) abstract statement showing the demand on account of fixed land revenue for each month of the first financial year under the new assessment.

Statements C and D are ephemeral, and are only intended to facilitate correct accounts on the introduction of the new assessments. Statements A and B are very important both for purposes of permanent record in the district and *tahsil* offices and for purposes of comparison and check in the offices of the Commissioner and the Financial Commissioner. The points which A is specially devised to bring out are—

- (a) the previous complete assessment of each estate, the deductions allowed out of that assessment, and the amount that was borne on the rent roll ;
- (b) the like particulars in respect of the new assessment ; and
- (c) the increase or decrease of demand resulting in each estate and in the whole number of estates assessed.

Special care will be necessary to see that the details of this statement agree with the gross village assessments already sanctioned ; and in particular *jagir* and *inam* deductions should be thoroughly checked. Complete vernacular copies of statements A and B will be filed in the *tahsil* and district offices. The English copies will be retained in the office of the Financial Commissioner.

A.—COMPARATIVE DEMAND STATEMENT SHOWING THE FIXED ASSESSMENT OF EACH ESTATE UNDER THE EXPIRED SETTLEMENT AND FOR THE FIRST YEAR OF THE NEW SETTLEMENT, WITH DETAILS OF PROGRESSIVE AND DEFERRED ASSESSMENTS CLAIMABLE IN FUTURE YEARS.
(Vernacular copies to be filed in District and Taluk Offices and English copy to be submitted to Financial Commissioner.)
(Vide Settlement Manual, paragraph 522.)

1	2	3	4	5	6	7	8	9	10	11	ASSESSMENT FOR THE FIRST YEAR OF THE NEW SETTLEMENT, viz., KHARIF 19 AND RABI 19 .										19	20	21	22	23	24	25																																																					
FIXED ASSESSMENT AS IT STOOD WHEN THE OLD ASSESSMENT EXPIRED AND ON WHICH THE LAST ABSTRACT RENT ROLL SANCTIONED BY THE FINANCIAL COMMISSIONER WAS BASED.											LAND REVENUE AND FIXED ASSESSMENT FOR GRAZING, SAJJJI, DATES, ETC.											Add Service commutation payable by revenue assignees.											Rate of interest paid at each harvest.		REMARKS, viz.—																																													
Assigned.											Assigned.											Assigned.											Rate of interest paid at each harvest.																																															
Jagirs and mufis.											Imams.											Zaidari allowances.											Other assignments.											Total.											Due to Government.											Total assessment.											Rabi.		Kharif.	
Add Service commutation payable by revenue assignees.											Total assessment.											Due to Government.											Total.											Decrease in Government demand by new assessment (columns 9 and 17).											Increase in Government demand by new assessment (columns 9 and 17).											In Detailed Village Assessment by the Commissioner.		New assessment sanctioned by the Commissioner.		Decrease in Government demand by new assessment (columns 9 and 17).		Increase in Government demand by new assessment (columns 9 and 17).								
(1) Explain any difference between columns 13 and 20; particularly the entries in these columns will be identical.											(2) No account of deferred assessments which will subsequently accrue, distinguishing sums deferred under protective leases of wells and sums deferred on account of progressive assessments.																																																																					

Notes.—Columns 4 to 10 and 12 to 18.—The great majority of the entries will be for land revenue proper. The occasional entries on account of other items of fixed revenue should be indicated in these columns separately, so far as they may be necessary for the purpose of the abstract revenue roll. Columns 11 and 19.—If some of the Jagirs and mufis pay service commutation, see columns 10 and 19, and others do not, enter separately the revenue on which commutation is due, and that on which it is not, and explain in column 25. Columns 12 to 18.—In some districts these columns will be blank, but it may be necessary to amplify the. These columns are inserted in order to render the form readily adaptable to varying local circumstances. Columns 19 to 25.—The totals of these columns should agree with the last abstract revenue roll sanctioned by the Financial Commissioner, and will be compared with the totals of the new abstract revenue roll prepared after announcement of the new assessments and submitted with this statement.

B.—SUMMARY OF DEFERRED AND PROGRESSIVE ASSESSMENTS NOTED IN COLUMN 25 OF STATEMENT A, WHICH WILL BECOME DUE IN SUBSEQUENT YEARS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Serial No.	Estate.	Total assessment of 1st year of new settlement (column 18 of above statement).	YEARS AND AMOUNTS OF FUTURE INCREMENTS (INCREMENTS ONLY TO BE STATED, AND NOT THE GROSS ASSESSMENT FOR EACH YEAR).									Total ultimate assessment of village (column 20 of statement A.)	REMARKS.
			1929-30.	1930-31.	and so on for each year in which any increment will accrue.						Total increments.		

NOTE.—Details of *khalsa* and assigned revenue should be given throughout in this appendix.

C.—COMPARATIVE ABSTRACT OF THE FIXED LAND REVENUE ROLL OF THE DISTRICT FOR THE LAST YEAR OF THE EXPIRING, AND THE FIRST YEAR OF THE NEW, ASSESSMENT.

(To be submitted to Commissioner and Financial Commissioner simultaneously with statements A and B.)

1	2	3	4	5	6	7
Tahsil.	Year. Kharif—Rabi.	Land revenue.	Grazing tax on Govern- ment grass lands, the demand on which is fixed.	Service com- mutation.	Total fixed income.	REMARKS.
A	1929-30	..				
	1930-31	..				
B	1929-30	..				
	1930-31	..				
Total	1929-30	..				
	1930-31	..				

EXPLANATION OF INCREASE AND DECREASE OF DEMAND FOR YEAR 1929-30.

(a)—Demand for 1929-30—Rs.

(b)—Add Increase during 1929-30, as follows:—

Nature of increase.	REFERENCE TO FINANCIAL COMMISSIONER'S SANCTIONING LETTER.			Amount of increase.	REMARKS.
	Office.	No.	Date.		
Total ..					

(c)—*Deduct* Decrease during 1929-30 as follows:—

Nature of decrease.	REFERENCE TO FINANCIAL COMMISSIONER'S SANCTIONING LETTER.			Amount of decrease.	REMARKS.
	Office.	No.	Date.		
Total ..					

(d)—Demand for 1929-30—Rs.

D.—ABSTRACT STATEMENT SHOWING THE DEMAND ON ACCOUNT OF FIXED LAND REVENUE FOR EACH MONTH OF THE FIRST YEAR UNDER THE NEW ASSESSMENT.

	Tahsil.
Total ..	April.
	May.
	June.
	July.
	August.
	September.
	October.
	November.
	December.
	January.
	February.
	March.
	Total demand.
	REMARKS.

APPENDIX XIX.

(SETTLEMENT MANUAL, PARAGRAPH 547.)

Recovery of Cost of Assessment from Jagirdars.

1. Every *jagir*, the annual value of which is not increased at reassessment by a sum exceeding Rs. 100, is exempted from contributing to the cost of assessment. A similar exemption is allowed in the case of all *jagirs* of an annual value (after reassessment) of less than Rs. 2,000. In all other cases a fixed charge amounting to 12½ per cent. of the annual value (after reassessment) of the *jagir* will be made. For the purposes of this rule the annual value of a *jagir* before and after reassessment will be its net value, after excluding commutation fees, etc., for the last year of the old, and for the first year of the new, assessment whether the *jagir* is under fixed or fluctuating, or partly fixed and partly fluctuating, assessment.*

2. No fixed rule is laid down as to the amount or number of instalments in which the cost of assessment should, under section 148 (2) of the Punjab Land Revenue Act, XVII of 1887, be recovered. The orders of the Financial Commissioner should be sought in each case.

3. For the recovery of the sums due under these orders the sanction of the Financial Commissioner will be required in every case. The Settlement Officer will report at the conclusion of his settlement the amount due from each *jagirdar*. The report should be accompanied by a statement in the form appended, and should furnish reasons for any partial or total remissions of the amount due, where, in the opinion of the Settlement Officer, the exaction of the full amount would entail hardship. But exemptions will only be granted in exceptional cases.†

*Punjab Government letter No. 23700-Rev., dated 19th December 1917, and memorandum No. 6140-R.v., dated 16th March 1918.

†Punjab Government No. 236-533, dated 30th March 1883, to Financial Commissioner.

STATEMENT TO ACCOMPANY REPORT ON THE RECOVERY OF COST OF RE-ASSESSMENT FROM ASSIGNEES OF LAND
REVENUE.

1	2	3	4	5	6
<i>Tahsil.</i>	Name of <i>jagir</i> .	Old revenue of <i>jagir</i> for last year of old assessment (net).	New revenue of <i>jagir</i> for first year of new assessment (net).	Amount proposed to be levied from the assignee on account of reassessment at 12½ per cent. on column 4.	Remarks, including proposed instalments, if any, for recovery of the amount in column 5.

APPENDIX XX.

Instructions for Settlement Officers in drawing up Assessment Reports.

Circular letter No. 9, dated Lahore, the 8th March 1909.

From—E. R. ABBOTT, Esq., I.C.S., Senior Secretary to the Financial Commissioners, Punjab,

To—The Settlement Commissioner and all Settlement Officers in the Punjab.

THE Financial Commissioner has recently reviewed the assessment reports of nine *tahsils* in the districts of Rohtak, Gurgaon and Karnal, and thinks it desirable to issue the following general instructions, with the view of simplifying the work of Settlement Officers in drawing up assessment reports, and of enabling them to put their calculations and conclusions more clearly. The marginal references are to those passages in the Financial Commissioner's reviews, where the reasons for these instructions are given.

2. In framing assessment proposals, the Settlement Officer should always bear in mind that his main object should be to distribute the total assessment, fixed by Government for the *tahsil* or assessment circle equitably over the different estates in proportion to the "net assets" or proprietary profits of each. The "net assets" or proprietary profits are, in the case of land held by tenants-at-will paying a full fair rent, whether in cash or kind, the actual average net receipts of the landlord in the form of rent, after allowing, on the one hand, for any realisations made by the landlord in addition to the nominal rent, and, on the other, for any portion of the nominal rent which he ordinarily fails to collect, for any expenses he may share with the tenant towards the cost of cultivation and for a reasonable return on his capital expenditure on the improvement and alteration of the land so far as that has not been already recovered by him. In the case of protected or privileged tenants who pay less than a full fair rent, and in the case of land cultivated by the owner himself, they mean what would be the average net receipts in the form of rent if the land were let at a full fair rent. Thus an estimate of the net assets or proprietary profits of a circle will represent what would be the average net receipts in the form of rent if the whole circle were owned by a single landlord, and were let by him to tenants paying not a rack-rent or a privileged rent, but a full fair rent according to the circumstances of the time and the existing standard of living of the unprivileged tenant class. If fairly distributed over the holdings of the circle, it will represent for each holding what would be the average net receipts in the form of rent if the holding were let at a full fair rent; that is to say, it will represent the present renting value of each holding.

3. The present assessment instructions, as sanctioned by the Government of India, require that the assessment of a circle or estate shall not exceed half the net assets, or proprietary profits, or renting value, and that any proposal to fix the land revenue at less than half the proprietary profits must be explained. In drawing up his Assessment Report therefore, the Settlement Officer's first object should be to present to Government as accurate an estimate as he can frame of what would be a fair full assessment at half the proprietary profits under present circumstances for the circle as a whole, and for each important class of land for which he proposes a separate revenue rate. In framing such an estimate, he must endeavour to hold the balance even between the general taxpayer and the land-revenue payer and, while being careful not to exaggerate the true proprietary profits of the circle, and making all reasonable allowances, he

should see that he does not go too far on the side of caution, and that he presents a just estimate of the true renting value of the land of the circle. It will be for Government to decide how far the actual assessment to be imposed shall fall short of half that renting value.

Gohana, paragraph 12.

Gohana, paragraph 6.

Panipat, paragraph 5.

4. Where a sufficiently large proportion of the cultivated area of a circle is held on cash rents, which can be considered to be true competition rents, neither rack-rents nor privileged rents, these form the best possible basis for an estimate of the proprietary profits or renting value of the land of the circle, representing, as they do, the result of the practical experience of tenants and landlord as to what rent in cash the different classes of land can fairly pay, year in year out, after making all allowances, so far as their experience goes, for varying rainfall, varying canal supply, varying outturn, varying prices, and varying cost of production. All factors which have to be roughly estimated by the Settlement Officer in framing a produce estimate based on rents in kind. In studying the cash rent statistics, he should eliminate rents paid in terms of the land revenue, unless there is a practice of paying a rent expressed as a multiple of the land revenue, rents which are obviously low or obviously high for special reasons, rents on exceptionally valuable lands, rack-rents, and rents paid by mortgagors to mortgagees, which are often complicated by interest calculations or unduly high owing to the reluctance of the mortgagor to give up the cultivation of his ancestral land. He should not, however, eliminate rents voluntarily paid by tenants to mortgagees, as these ordinarily are true fair competition rents. The remaining rent statistics will form the basis of his estimate of normal cash rents for the different classes of soil. He will then have to make allowance, where his enquiries show it to be necessary, for rents which, though agreed upon, fail to be collected in full, and for lands which, owing to their sometimes remaining fallow, fail to pay the full normal rent every year. The result will show what are the actual average receipts in the form of rent obtained by a landlord from ordinary land let on normal cash rents. No allowances should be made for expenses of management and collection (Government does not approve of the recommendations on this subject made in paragraph 7 of Financial Commissioner's Palwal Review). The Settlement Officer should then consider whether it is fair to assume that the renting value of the other land of the circle, and especially of that cultivated by the owners themselves, is similar to that shown by the cash rents to be the renting value (or proprietary profits) of the land actually so rented, i.e., whether the proprietor of an average holding of ordinary land, which he cultivates himself, could, if he chose to let it on cash rent, readily obtain a similar rent for it. If the land held under their own cultivation by the proprietors is distinctly better or distinctly worse than that held on normal cash rents by tenants, he should raise or lower his estimate of its renting value accordingly. He will then be in a position to frame a cash rent estimate of the proprietary profits or renting value of the whole of the cultivated area of the circle by applying to the areas of the different classes of soil the corrected normal cash rents for those classes.

5. The question arises as to what areas should be adopted for this calculation. In the case of land irrigated from wells, the general rule now is that in the classification of soils all land should be recorded as *chahi* which has been actually irrigated in two or more harvests during the four years preceding settlement, and for which permanent means of irrigation still exist. This will ordinarily give, as the total area of *chahi* for the circle, a larger area than has been irrigated in any one year, or than is irrigated on an average of years. In some parts of the province the area irrigated from wells does not vary very much from year to year,

while in others it varies greatly, the wells being little used in years of good rain-fall, while, in years of drought, nearly every well is worked to its full capacity. Especially in the latter tracts, it would be unsafe to assume that the normal rents paid by tenants on land commanded by wells, even if they are paid in years in which the well is not used, could always be obtained even on all the land recorded as *chahi* which is cultivated by the owners themselves. If on enquiry there

Palwal, paragraph 14.

Panipat, paragraphs 8 and 9.

appears to be any reasonable doubt on this point, the normal *chahi* cash rent rate may be applied not to the recorded *chahi* area, nor to any assumed area, nor to the area irrigated in any one year, but to the area actually irrigated from wells on the average of a typical series of years (allowances being made, where necessary, for recent changes in the means of irrigation).

6. There is not the same risk of an overestimate of rent in the case of canal-

Panipat, paragraph 8.

irrigated land, but, if circumstances render it desirable that the rents paid on such lands should be specially tested, the normal cash rent rate for such land may also be applied, not only to the recorded *nahri* area, but also to the area actually irrigated by the canal on the average of a typical series of years. The case of canal-irrigated land is somewhat complicated by the fact that the charges for canal water are on some canals divided in the accounts into occupier's rate, water-advantage rate and cesses on the latter; but we find almost everywhere that landlords and tenants lump these charges together, and that, where the land is let on cash rent, the whole of these canal charges are paid by the tenant; and, as a matter of fact, where the actual charge made by Government to the cultivator who irrigates his field consists of these three items, they do, taken together, represent the actual cost to him of the water, that is to say, if he takes the water, he has to pay Government the sum of these charges, and, if he does not take the water, he pays none of them. In such a tract whatever may have been the theoretical origin of the water-advantage rate, it must be treated, in accordance with the facts, as now forming part of the cost of the water, and the cash rent estimate must be framed so as to show what are the proprietary profits of irrigated land after the whole of the fluctuating charges made by Government for canal water have been defrayed, but before payment of land revenue and cesses thereon. Careful enquiry should be made as to the actual custom regarding the payment of the fluctuating charges by landlords or tenant when land is leased on cash rent. The Settlement Officer should always state what have been the actual realisations of occupier's rate, water-advantage rate and cesses thereon for a typical series of years, and the average incidence of the total realisations on the average area actually irrigated. The area

Panipat, paragraphs 9—11.

Palwal, paragraph 15.

Panipat, paragraph 9.

recorded at *chahi* or *nahri*, which is in excess of the average area actually irrigated, should in the cash rent estimate be treated as unirrigated.

7. So much for the cash rent estimate. The Settlement Officer should also frame a quite independent produce estimate, based on the rents in kind found to exist, on the areas actually cropped on the average, on the estimated outturn, and on average prices. There is little to add to the existing instructions on this subject, except that the prices assumed should not be based on those of a long series of years, the object being to estimate the normal prices under present circumstances at which an average cultivator in a village at an average distance from markets may fairly expect to sell his produce in the village on an average of years; and that, as in the case of the cash rent estimate, the Settlement Officer should calculate what would be the average renting value of the whole of the

land of the circle if it were let at the prevalent rates of rent in kind, and the tenant paid the whole of the fluctuating canal charges and none of the land revenue and cesses thereon. No estimate should be made of one-sixth of the gross produce, but a calculation should be framed of the proportions borne by the renting value of the land to the value of the gross produce.

8. The Settlement Officer should then compare these results of the two mutually independent estimates, and arrive at a definite estimate of what are the true net assets or proprietary profits of the circle. As already said, where the area on which normal cash rents are paid is sufficient to form a trustworthy basis for an estimate of the renting value of all the land of the circle, the cash rent estimate is a much surer guide than the kind rent estimate; but the Settlement Officer should take both into account and state definitely, with justice both to the general tax-payer and the land-owners of the circle, his final conclusion as to what would be a full fair half-net assets assessment for the circle if it were fixed at half the actual renting value of the land under present circumstances after payment of all existing fluctuating canal charges, but before payment of the land revenue and cesses thereon. In framing this estimate, no regard should be paid to the existing land revenue demand. It will be an estimate, for a "wet" assessment, on the basis that the fluctuating canal charges remain as at present, and that the land revenue should absorb half the proprietary profits remaining after these charges have been defrayed. As the estimate can only be an approximate one, it should be stated in round numbers, usually in even thousands. The Settlement Officer should, at the same time, propose the rates which he would, after comparing the rates given respectively by the cash rent and the kind rent calculations, consider suitable to use if the full fair half-net assets assessment were spread over the villages of the circles (treating as irrigated only the area actually irrigated on an average of years) with the object of taking from each village a full half of the renting value of its land. As the rates can be only approximate, they should usually be expressed in even annas.

9. He should then check this estimate and his rates with the corresponding half-net assets estimates for adjoining or similar assessment circles. He should also check it by assuming for the moment that the assessment imposed at the previous settlement was a full fair half-net assets assessment in the circumstances of the time, and calculating what an assessment at similar pitch would be if allowance were made for changes that have occurred since, such as increase or decrease of cultivation or irrigation, rise or fall in prices or rents, etc. But, as it is well known that, as a matter of fact, the pitch of former assessments varied considerably in different *tahsils*, little stress should be laid on this check. Where sufficient statistics are available, a further rough check can be applied by a comparison of the selling and mortgaging value of land as shown by statistics of recent transfers, as those show the estimate framed by purchasers and mortgagees of the average net profits to be expected from the cultivation of land after defraying not only the fluctuating canal charges and all costs of cultivation, but also the land revenue and cesses.

10. Having thus arrived at a definite opinion as to what would be a full fair half-net assets assessment for the circle, the Settlement Officer should then, after consideration of all that affects the assessment, and especially of the amount of the existing assessment and the enhancement that it will be advisable to take,

make his proposal as to what the future assessment of the circle should be, and should remember that the assessment instructions require him to explain any proposal to take less than the

Gohana, paragraph 5. full half-net assets. Apart from other considerations, it will usually be advisable to go nearer the full half net-assets the smaller the percentage of enhancement indicated by the estimate is. In the case of canal-irrigated, land, the proposed assessment at this stage will be a "wet" assessment, i.e., the land-revenue demand which the Settlement Officer would fix for the circle if the fluctuating canal charges remained as at present and the fixed land revenue were to absorb half the proprietary profits remaining after those canal charges, which represent the actual cost of the water, have been defrayed. The assessment he proposes for the circle should usually be stated in even thousands of rupees. He should, at the same time, propose the rates he would employ in distributing this assessment over the different villages (treating as irrigated only the area actually irrigated on the average of a typical series of years, modified, where necessary, to allow for recent changes in the means of irrigation) with the object of spreading the total assessment proposed for the circle over the different villages, composing it in the same proportion to the proprietary profits of each. His rates should usually be stated in even annas, and it is not necessary that, when applied to the areas of the different soils, they should give exactly the amount proposed by him for the assessment of the circle, though they should give approximately the same result. These rates will be applicable to the areas as recorded at his reclassification of soils, modified by the figures for the actual average irrigation of each village. He should propose comparatively low rates for inferior classes of soil near the margin of profitable cultivation. He should also utilise the rent statistics given by the produce estimate, and propose a separate set of rates which, when applied to the average matured area of each class of cropping in the circle, will give approximately the assessment he has proposed for the circle.

Gohana, paragraph 18.
Panipat, paragraph 14.
Gohana, paragraph 25.
Palwal, paragraph 14.
Panipat, paragraphs 17 and 19.

pose a separate set of rates which, when applied to the average matured area of each class of cropping in the circle, will give approximately the assessment he has proposed for the circle.

11. In the case of canal-irrigated land, the Settlement Officer should then consider whether (1) the fluctuating canal charges should be maintained at their present pitch and the fixed land revenue be assessed as "wet" land revenue on the proprietary profits remaining after defraying those charges; or (2) whether the charges for the water should remain practically as at present, and the fixed land revenue be assessed as a "dry" land revenue on the land in its unirrigated aspect, the assessment on the enhanced proprietary profits due to canal irrigation being taken in the form of a fluctuating canal-advantage land revenue rate assessed on the same areas as are assessed to occupier's rate; or (3) where the occupier's rates are liable to be revised at settlement, whether the fixed land revenue should be a "dry" assessment, the whole of the remaining charges due to canal irrigation being taken in the form of enhanced occupiers' rates. All rates for a fluctuating demand should be so fixed that they may be easily calculated by the *patwaris* and by the cultivators themselves on the local measures of area. He should frame a definite estimate of what the average total realisations by Government from the land, whether in the form of fixed land revenue, fluctuating land revenue, or fluctuating canal charges, are likely to be under either system, on the assumption that the average irrigation will continue to be much the same as it has been during

Gohana, paragraphs 22—35.

Palwal, paragraphs 12—19.

Panipat, paragraphs 2—4, 14—18.

a typical series of years, and compare that estimate with the actual sums collected under each head during that series of years ; and should bear in mind that the enhancement, as it is felt by the people, will not be that given by the fixed land

revenue alone, but that given by the total realisations from the crops under all these heads. In proposing rates for the distribution of the fixed "dry" land revenue over the villages of a circle, he should ordinarily, and especially where the renting value of canal-irrigated land is considerably higher than that of unirrigated land, propose a higher rate for canal irrigated land (average areas actually irrigated) than for unirrigated land because the crops of a well-commanded village are more secure than those of an ill-com-

manded village, and because, however high the fluctuating charges on canal-irrigated land may be raised, the average net proprietary profits of a well-commanded village will still be considerably higher than those of an ill commanded village, so that the former should pay a proportionately higher share of the total fixed assessment of the circle than the latter. In proposing a fluctuating canal-advantage land-revenue rate, he should bear in mind that fluctuating rates, which leave it largely to the land-owner's option what he shall actually pay Government at each harvest, may safely be raised nearer to full half-assets rates than a fixed assessment, regarding the amount of which the revenue-payers have no option. And, in proposing a new schedule of enhanced occupier's rates, he should bear

in mind not only this consideration, but the fact that, in deciding what price to charge for its canal water, Government is not bound by any rule of limitation to half-net assets, but is entitled in theory to charge for it rates approximating to the value of the water to the irrigator as shown by the higher rents realised on canal-irrigated, than on unirrigated, land, while leaving him a good margin of profit so as to make it well worth his while to utilise the available irrigation from the canal.

12. Should the Settlement Officer think it advisable to introduce into any portion of the tract under assessment a system of fluctuating land revenue, he should, before making his proposals, consider the system which has been gradually evolved after long experience in the West Punjab. If he thinks it necessary in the case of a fixed assessment to propose rules for the reduction of assessment in the case of the spread of *reh* or water-logging or submersion of land, he will find suggested rules in paragraph 82 of the Palwal Review and paragraph 83 of the Nuh-Ferozepore Review.

18. At the end of his assessment report the Settlement Officer should give a statement showing clearly the results of his proposals for each circle and for the whole *tahsil*, for both fixed and fluctuating charges (including all canal charges), and how they compare with present realisations, and with his half-net assets estimate. He should also estimate what proportion of the value of the gross produce his proposed assessment will absorb, and how it compares with the fraction absorbed by the assessment at the previous settlement.

14. When the Settlement Officer receives orders on his assessment report, and proceeds to distribute the fixed assessment sanctioned by Government over the villages, using as his guide the rates sanctioned by Government, he should aim at making the total assessment of the circle, i.e., the sum of the village assessments, as nearly as possible equal to the sanctioned figure ; and, although he will have the usual margin of 8 per cent., he must not deliberately assess the circle above or below the amount fixed by Government. He should endeavour to make every village pay approximately its fair share of the total demand for the

circle, but, where that share gives as small enhancement, he should remember that the sanctioned rates are below the true half-renting value, and that he may fairly go well above them where the new assessment of the village gives a smaller enhancement than is being taken from the circle as a whole. He should not reduce the existing assessment of a village merely because it is above that given by the sanctioned rates unless he considers it is higher than half the true renting value of the village. The new assessment of a village should usually be fixed in a multiple of Rs. 25, Rs. 50 or, in the case of large sums, Rs. 100. In making his distribution over villages, he should use not only the sanctioned soil rates, but the rates on average harvested area mentioned in paragraph 10 above, as they automatically call attention to the extent to which the cropping of one village is more or less secure than that of another; and, in tracts where the fluctuations of cropping are very great, they really give a more trustworthy guide to the distribution of the assessment over villages than soil rates do. Even where no rate has been sanctioned for the culturable waste, the Settlement Officer should allow for any large areas, as it is only fair that a village which has a considerable area of good land under grass and trees should pay more than one that has none. All through, in making this distribution, he should remember that it is now a case between one village and another, and that, if he makes one village pay less than its fair share of the total assessment fixed for the circle, the other villages will have to make up the difference.

15. As regards deferring a portion of the enhancement in villages in which it would be unduly sudden to impose the full assessment at once, the Settlement Officer should bear in mind that in canal-irrigated villages the enhancement, as it will be felt by the people, will be the enhancement in the total realisations made by Government, including the canal charges; and that, so far as the canal

Palwal, paragraph 24. charges are fluctuating, it is at the option of the cultivators to determine what the enhancement in canal realisations will actually be. Usually, except where there has been any extraordinary change in the condition of a circle, such as the opening of a new canal which has led to a great extension of cultivation, or where a large proportion of the new assessment will be deferred on protective leases, when the enhancement of the fixed demand on any village exceeds 88 per cent. by any considerable amount, the amount exceeding that percentage should be deferred for five years. If it much exceeds 66 per cent., a further sum should be deferred for another five years. The final demand should be announced and distributed over the holdings and the five years' reduction be given by temporarily reducing the demand on each holding by so many annas in the rupee. The Settlement Officer should use this power so as to ensure that after five or ten years each village will be paying approximately its fair share of the total assessment sanctioned for the circle.

NOTE.—It must be remembered that one-quarter, and not one-half of the net assets is the maximum land revenue that can be taken under the Land Revenue Amendment Act of 1928.

APPENDIX XXI.

(SETTLEMENT MANUAL, PARAGRAPH 222.)

Instructions for bringing up to date at resettlement the field map of the previous settlement without recourse to remeasurement.

PREFATORY.

All districts in the Punjab have now been repeatedly settled, and have been furnished with village field maps which in many districts have been prepared on the square system of survey (Chapters VI and VII of the Mensuration Manual) and in some others have been found not to be inferior in accuracy even to the maps of the square system. The records-of-rights based on these maps have been maintained since 1887 on the system then introduced along with the Land Revenue Act. The first thing a Settlement Officer now has to consider therefore is to what extent he can, for his special revision of the records-of-rights, utilise the existing maps and records without resorting to resurvey. In deciding that question, he should remember that what is required is to give the people a map and record sufficiently accurate for their needs. These needs may be summed up as (1) avoidance of disputes and a means of deciding them promptly when they do arise, and (2) a fair distribution of the land revenue over the holdings of each village.

THE CHOICE BETWEEN REMEASUREMENT AND REVISION.

2. The settlement must begin with an examination of the existing maps, i.e., the map of each estate forming part of the record-of rights under section 31 (2) (c), Land Revenue Act, to enable the Settlement Officer to decide whether by revision they can be made sufficient for these purposes. This examination should be directed to the points enumerated below. It should be made by the *patwari* in the first instance, and carefully checked by the *kanungo* and *naib-tahsildar* within the village concerned :—

- (1) Whether the existing map suffices for an accurate *girdawari* to be made, or whether, owing to its general inaccuracy or to *nautor*, new numbers, partitions, and the like, such a *girdawari* is difficult and unsatisfactory.
- (2) Whether the fields of the old *shajra* agree fairly well in shape and in position with existing circumstances. This can best be tested by lines (*farzi watar*) being chained between fixed recognisable points, such as trijunctions, wells, boundary pillars, and angles of roads. In a small village one of about 200 *karams* in length will suffice, but in large villages possibly as many as six may be necessary unless the first ones show the old map to be quite unreliable. Discrepancies up to 2 per cent. may be neglected. A few fields too should be checked by their sides being measured. The correctness of a map is much more certainly determined by means of checking corners of fields and other fixed recognisable points than by merely seeing whether the cuttings of the diagonals are at the same distances as at settlement. If the cuttings have changed, this probably only means that fields have been divided up or combined and these give little trouble to correct, but, if the position of permanent corners or other features which existed at settlement, when tested by perpendiculars, is found to be very different by measurement from what it is by scale on the map, this means that the old map is incorrect and correction will be very difficult. It is very important that, when the tests prescribed in this sub-paragraph are being

applied (they will usually be unnecessary if the field map was made on the square system of survey), the map which is being tested should be referred to on the spot.

- (8) A special classification should be made of the fields of the village. Each field which on the ground is apparently of the same size and shape as at settlement, and which has recognisable permanent boundaries, will be marked either A or B in the *khasra girdawari* according as it will be necessary (A) to leave the field as it is, or (B) to include it with other adjacent fields in one new *khasra* number.* Each field which will have to be divided into several fields owing to *nautor* or partition or in which there has been any obvious change will be marked (C) if the original boundaries of the field are clearly traceable and continue to be in part or whole the boundaries of the new field, and (D) if the original boundaries are now unrecognisable or if the new boundaries differ so much from the old that the latter will have to be erased in the map. The number of fields coming under each head will be totalled, and ordinarily remeasurement should not be necessary if class (D) does not contain more than 20 per cent. of the whole, and, even if it contains more than 20 per cent., remeasurement may not be necessary—see paragraph 6 below. This classification can generally be made by means of an examination in the *patwari's* map of the fields shown as *min* and *batta* in the *khasra girdawari* and in the last *jambandi*, but, if a more minute examination is found to be necessary in any village, it can be combined with the *kharif* or *rabi girdawari*.

3. The *patwari*, if he has previous knowledge of the village, and, if not, the *kanungo*, will record a note† which he will submit to the *naib-tahsildar* showing the result of the application of the above tests, and giving his reasons for considering that correction of the map is or is not sufficient. In this note he will mention the condition of the *tahsil* copy of the field map—see paragraph 9 below. The *patwari* or *kanungo's* work must be closely supervised by the *kanungo* or *naib-tahsildar*, and must be checked on the spot to an extent that should not ordinarily cover less than 20 per cent. of the work. The headmen and leading villagers should be consulted as to whether they have found the map of any part of the village inaccurate, and especially whether there are any disputes regarding the boundaries of fields and their cause. Great care must be taken that no mistake is made as to the possibility of correction for, on the one hand, there is no greater waste of time than to discover after several weeks' work at correction that remeasurement is after all necessary, and, on the other, it involves unnecessary expense and delay, and trouble to the people, to remeasure, where correction would have been sufficient. The *naib-tahsildar* will, after checking the *kanungo's* work, send on his report, with his own opinion, to the *tahsildar*.

4. The file, on reaching the *tahsildar*, will be examined by him, and if he is satisfied that map revision will suffice, he will issue an order at once to the *naib-tahsildar* to that effect, and he will send the file, through the Extra Assistant Settlement Officer, to the Settlement Officer, who will either confirm the decision, or, if he disagrees, will issue orders for remeasurement.

5. If the *tahsildar* is of opinion that a village should be remeasured, he should submit the reports of the *naib-tahsildar* and *kanungo*, through the Extra Assistant Settlement Officer, to the Settlement Officer, without whose previous

*See paragraph 24 below.

†A specimen note is appended at the end of these instructions, giving the result test (2).

sanction remeasurement should not be commenced. Remeasurement should generally be recommended—

- (a) if the fields placed in class D constitute more than 15 per cent. of the total number, or
- (b) if the internal measurements alone are so very far wrong as to make correction difficult.

It is not generally necessary to remeasure a village simply because the boundaries shown in the map do not tally with the boundaries as shown in the maps of adjacent villages. Also there are cases in which remeasurement may be dispensed with, even if the fields in class D number more than 15 per cent. of the whole, *e.g.*, if they are all within a ring fence, and have been formed by partition or by the breaking up of the waste, it may be possible to show them in the revised field map by correction without remeasurement. All such matters should be noticed by the *kanungo* and by the *naib-tahsildar* in their reports.

6. The general rule for deciding which course should be followed is that the map of last settlement should be accepted if possible. If the scale on which the map for a particular village was made was inconveniently small, the old map can be brought up to date on the old scale and a copy of it enlarged by scale or pantograph for the *patwari's* use in *girdawari*. This enlarged map will be sufficiently accurate for *girdawari* purposes, and the *patwari* can be given for other purposes an exact copy of the revised small-scale map. It is not necessary to remap a whole village because in part of it land has been broken up for cultivation or a partition has taken place. In such cases such remapping as is necessary should be confined to the part of the village affected, and should be incorporated in the amended field map of the village by the inclusion in it of the new sheets in original, if possible, but otherwise by copying. Similarly, if the internal details of the old map are wrong only in respect of a distinct portion of the estate, that portion alone need be remeasured.

7. The files of these enquiries will be kept in the *tahsil* office, and will be destroyed after the final attestation by the *tahsildar* of that village. The *tahsildar* will keep a register of these, showing—

- (1) Name of assessment circle ;
- (2) Name of village ;
- (3) Note of method of survey adopted (*tarika paimash*) ; and
- (4) Date of Settlement Officer's order.

8. It is usual to draft gradually to a district, during the six months before it is placed under settlement, the settlement officials who become available from settlements nearing completion in order that the Settlement Officer may find establishment ready to start work with immediately the settlement begins. The examination of maps prescribed in the preceding paragraphs will be commenced by this establishment in order to expedite the commencement of field work after the Settlement Officer has joined his appointment. They should also attest as many old *jamabandis* as possible in order to bring mutations to light, and they should ascertain what trijunction pillars and other survey marks require to be replaced or repaired.

METHOD OF REVISION.

9. In the villages in which remeasurement is necessary (and in riverain tracts remeasurement will often be necessary), the survey will be carried out on which—

ever of the systems prescribed in Chapters VI and X of the Mensuration Manual is the more suitable. For the other villages, which will generally be the majority, the next thing to decide is whether any of the existing copies of the settlement map shall be utilised for work in the field, or whether a copy shall be especially made for this purpose. Existing copies which have in some settlements been utilised are—

- (1) the *tahsil* copy (*part tahsil*) of the settlement *shajra* ; and
- (2) the copy on cloth (*latha*) used by the *patwari* in the *girdawari*.

The former is sometimes on cloth, sometimes on paper and sometimes on mapping sheets, and it is generally soiled, scratched or torn to such a degree as to be unsuitable for such use. The second map, i.e., the *patwari's girdawari latha* copy, is, as a rule, even more unsuitable, and the use of either for the purpose of map correction is open to the objection that all amendments have to be made by crossing out black lines with red ink and drawing new lines with the same, and that consequently a fresh copy of the map has to be prepared to be the revised field map. The Financial Commissioner therefore has forbidden the use of such copies for the purpose of map correction, and has directed that a special copy should be made for the purpose ; and it will expedite and simplify work to have the special copies for field use made at the same time and by the same process at headquarters for all the villages in the district. An establishment of one *naib-tahsildar*, two *kanungos*, and 20 *patwaris* or temporary hands to do the actual tracing will probably be found sufficient.

10. The copies of the settlement maps made for field use may be either—

- (1) traced on tracing cloth, which may be either (a) in one large roll or sheet, comprising the whole map, or (b) divided into portions of convenient size for placing on a drawing-board or plane-table, e.g., square sheets each containing 4 or 16 survey squares ;
- (2) traced on cloth (*latha*) ;
- (3) traced on mapping sheets by means of a frame placed in the doorway of a dark room ;
- (4) transferred to mapping sheets by black or blue carbon paper ; or
- (5) transferred to mapping sheets by means of an intermediate tracing on transparent paper.

Of these processes, that which in the shortest time gives the most accurate copy of the settlement map, and, at the same time, the most suitable for work in the field, is the fourth, and it is accordingly prescribed for general use, and no other process may be made use of without the special sanction of the Financial Commissioner. Cloth maps are liable to stretch, are easily blotted, and do not readily take pencil lines. Large rolls of tracing cloth are too unwieldy for use in the field. And tracing cloth is liable to stretch in damp weather, and is not so suitable as mapping paper for pencil work. Tracing by means of carbon paper is easier than through a frame, and gives equally reliable results. Where the old field maps are on unbacked paper, or are worn or frayed, it is advisable to lay oiled paper over them while the trace is being taken as otherwise the bone tracing pen is liable to tear the map.

11. In the special copy of the map of last settlement which is made for field work all the field boundaries, field numbers, *karukan* and other entries should be in pencil, and it will be convenient to use English figures for the field numbers and Arabic numerals for the *karukan*. When corrections are made, the altered boundaries can then be rubbed out, while the new boundaries should be inked in after the *kanungo's* inspection, as is done in measurement on the square system.

When work in the field is finished, the map is fit to be filed as the *part sirkar* of the new settlement field map, and all that is necessary is to make from it a copy for the *tahsil* (*part tahsil*). This copy may be on mapping sheets or on tracing cloth in the discretion of the Settlement Officer.

12. Ordinarily, when the copy of the map for use in the field has been made, or while it is being traced at the *sadr*, work should begin with the preparation of the *khataunis* and *shajra nasb* in the manner prescribed in paragraphs 1 and 2 of Appendix VII. But in small estates or in estates in which the proportion of fields that have undergone change is small (e.g., if the number of fields placed in classes B, C and D is under 10 per cent.), the Settlement Officer may dispense with the preparation of *khataunis*. In that case, the new *jamabandi* will, after completion of the field work described in the following paragraphs, be prepared from the old in the same manner as a quadrennial *jamabandi* is prepared from the previous *jamabandi*, that is to say, the *patwari* will draft his new *khata* entries in pencil either on the old *jamabandi* or on an intermediate rough note. It is important that the pencil draft, or whatever the Settlement Officer may prescribe in its place, should be preserved until the new *jamabandi* has been checked by the supervising officers, so that they may be able to refer to it if necessary. When this system is adopted, *parchas* (paragraph 2, Appendix VII) should be distributed as soon as the *patwari* has written out the *jamabandi*, so that objectors may have an opportunity of addressing the *kanungo*, *naib-tahsildar* or *tahsildar* before final attestation takes place. (Although a discretion is thus allowed to Settlement Officers to dispense with the preparation of *khataunis* in certain classes of villages, the system so far as it has been tried has not found favour with most of the officers who have tested it.)

12-A. After the *khataunis* have been prepared, or, if they are dispensed with as soon as he is supplied with a trace of the settlement field map, the *patwari* will proceed to the work of correction. He will have with him (1) the copy of the former map which has been supplied to him for field work, (2) a board on which he can place the map when he makes the necessary alterations in it, (3) his *girdawari* map also, (4) the village papers, including the *khasra girdawari*, in which at the preliminary examination of the maps the fields were classified A, B, C and D [(paragraph 2 (4) above and (5)], his cross-staff, chain and flags. He will commence work at the point from which the old numbering of the fields commences, whether it is the north-west corner of the village or not, and he will, except in the cases indicated below, take the fields in the order of that numbering. But in his own work he will give a new series of numbers to the fields, each of the fields shown in the field book being given a separate number, and none being shown as "*shikast*" of a certain old number, i.e., the procedure of the note to column 1 of the *khasra girdawari* in Standing Order No. 22 will not be followed.

13. The order of the field numbers should be that which it is most convenient for the *patwari* to follow at his *girdawari*, and in most cases it will generally be found best to follow the order of the old field numbers. When an old number is broken up into two or more, care should be taken to number the parts of the old field in such a way that the sequence of the fields on the ground shall conform to the above principle and be as regular as possible, and that two consecutive field numbers shall not be at a distance from one another. Again, it is very necessary to ascertain when measuring one field whether the adjoining field is owned and cultivated by the same persons as the field under measurement, for, if it is so, then both fields should probably be measured in one number. Whatever the old *khasra* numbers were, the fact that the sequence of the fields will be spoiled is no reason against clubbing fields which ought to be clubbed. When a new canal distributary, or railway, or road has been made through a village since settlement, it is usually best to measure all the fields on one side of the canal, etc. first, and

then cross over to the other side. When this is done, care must be taken not to omit any field in the process of correction, and fields watered from the same well should generally have consecutive numbers, even when they are separated by a road.

14. The *patwari* will work through the fields of the village in the above order, and, in regard to each field as he comes to it, will first see how it has been classified in the preliminary examination—paragraph 2 (4) above. If it has been classed as A, and he is satisfied by his eye that no alterations have occurred since settlement, he will not measure the sides unless the owner for special reasons asks him to do so, but will repeat in the map the previous *karukan*, and will enter in the field book the old area, with the word *badastur*, in place of the details of area calculation. If the field has been classed as B, *i.e.*, has to be clubbed with others, but is otherwise unchanged, he will similarly repeat in the map the previous *karukan* (eliminating fractions, if any, by taking the nearest whole number), without rechaining, while in the area column he will show the old area of each old field number, treating it as if it were a *gosha* of the new one, though it will not be marked by a dotted line as a *gosha* in the map, and he will total these areas in order to get the area of the new field number. In special cases, *e.g.*, where the extraction of areas at the previous settlement is known to have been seriously defective, though the maps are accurate, the Settlement Officer may direct that the areas of the A and B fields shall be taken out afresh. If the field is classified as C or D, *i.e.*, has been divided up or has had its boundaries altered, and it is necessary to remeasure it or a portion of it, the *patwari* should proceed as directed in the Measurement Manual; that is, he should find two or three fixed points on the boundary of the field or of the neighbouring fields which are correctly shown in the old map, chain the distances between them, fix the corner of the new field with the help of the cross-staff, if necessary, and draw them in the map by scale with pencil. The new *karukan* will be entered in the map and the area will be taken out by the *patwari* in the field book on the system (*lampet* or diagonal and perpendicular) on which areas were taken out when the original map was made. When the area is calculated by diagonal and perpendicular, those should be chained on the spot; this is particularly necessary in the case of maps which were not prepared on the square system. Where the area to be measured is large, it may be necessary to lay one or two squares or to fix one or two triangles, but this should not be done without the sanction of the *naib-tahsildar*, who should report to the *tahsildar* that he has given this sanction.

15. The procedure for measuring the fields classed as C may sometimes have to be adopted in regard to those classed as A or B, *e.g.*, where over large areas of waste or fallow there are no permanent field boundaries, and the *zamindars* wish their boundaries to be pointed out.

16. In each case, whether the field is A, or B, or C, or D, the new class of soil has to be entered in the field book. If the new class differs from the class entered in the last settlement record (*misl haqiqat*), then the new soil should be entered in red ink, and the *kanungo* should initial the entry, or any alteration he may make in it, as a sign that he has checked it on the spot. Any superior officer, *naib-tahsildar*, *tahsildar*, Extra Assistant Settlement Officer, or Settlement Officer who checks or alters the entry should also initial the entry or alteration. This procedure enables the *fard tabdil iksam arazi* to be dispensed with. In the *khataunis* and *parchas* the soil entries should be made in black ink.

17. In each case also the *patwari* will enter up the new field number in pencil in the map, and enter the field in the *khatauni* and the *zamindar's parcha*, noting in each its area and class of soil.

18. If in checking a field the *patwari* finds that an old field boundary no longer exists on the ground, and is no longer a division between plots held in different rights, he will draw a wavy pencil line through it, and it will then, after the *kanungo's* inspection, be erased with india-rubber.

19. When there has been any small alteration of field boundaries, and there is a permanent boundary on the ground, the *patwari* will show that as the boundary in his map, and, if there is no permanent boundary, then he will measure by the old map unless the owners agree to his showing the boundary of possession as the true one.

20. If, however, there is a discrepancy between present possession and the old map, and there is a real dispute between two parties, and the area in dispute exceeds one *pacca biswa* (or 2 *marlas*) in irrigated land or 3 *pacca biswas* (or 6 *marlas*) in other land, then the *patwari* must measure the disputed area as a separate number.

21. It will often be found that parts of large waste fields have been brought under cultivation since settlement. The cultivated portions will then have to be measured separately from the *banjar*, but the areas of the new cultivation and of the remaining *banjar* need not be worked out separately unless the field has been classified as C or D. If it has been classified as A or B, the cultivated area as ascertained by measurement should be deducted from the recorded total area and the balance should be shown as the remaining waste.

22. To guide the colourist who will have to colour the map at headquarters, the *patwari* will, in the case of such a field, draw a fine ink line dividing the waste from the cultivation, and will, in addition, make a rough hand-sketch in the last column of the field book. Also, for the guidance of the colourist, he will, as field work goes on, prepare the *fard rangsazi*, or list of fields, for colouring purposes. The form explains itself in a great measure—

Fard Rangsazi.

Cultivated.	<i>Banjar jadid.</i>	<i>Banjar kadim.</i>	<i>Rastah.</i>	<i>Nala or Paro or Johar.</i>	Graveyard.	*	*
	<i>Musavi.</i>	$\frac{A}{1}$					
74—78	81—86	73	64—69	107	90		
89	70—72	79	87	108			
91—105	106	80	88				
X	X	X	X	X	X	X	
	<i>Musavi.</i>	$\frac{A}{2}$					
120	121—135	181 min.	181	..	181 min.		
126—180	..	..	183				
X	X	X	X	X	X	X	

*Spare columns for other descriptions of land if required.

The headings of columns should be first filled up to correspond with the list of conventional signs (*naksha alamat*) : for instance—

- (1) Cultivated,
- (2) *Banjar jadid*,
- (3) *Banjar kadim*,
- etc., etc.

Then across the first page will be written “ *Musavi*—^A”, after which the fields on that *musavi* will be entered in their proper columns. The fields on—^A will be ¹ ²

treated in the same way ; after the A *musavis* are finished, the B *musavis* will be begun, and so on. From this form it will be easy for the *rangsaz* to do the colouring, as he will colour each class in turn on the *musavis*, and he will have no excuse for making mistakes, and each colour will be of the same shade throughout. The *kanungo* should note that, if a field is partly on one *musavi* and partly on another, it will be entered twice in the *fard rangsazi*, and, where a *khasra* number comprises two or more classes, its number will be entered as “ *min* ” in each column applicable. The *fard rangsazi* can be dispensed with entirely if the *patwari* preparing the map and field book can be entrusted with the colouring, and if he is instructed to enter all fields, including class A, in the field book. In that case it is sufficient to have an extra column in the field book in which when making the other entries relating to the field the *patwari* can enter the colour to be given to it. Before field work commences it should be ascertained for each circle whether the *patwari* is neat enough to be entrusted with his own colouring and to be relieved of the task of preparing the *fard rangsazi*.

23. When any new water-course has been made since last settlement and is not shown in the old map, it should be marked by the *patwari*, but need not be given a separate number unless it is the property of someone other than the owner of the field through which it passes. If it does not irrigate the field, this fact should be noted in the *khatauni*. If a new *band*, or minor, or railway, or road has been made, it should be given a separate number for its entire length within the estate.

24. In clubbing fields together, and in deciding what fields should be classed as B [see paragraph 2 (4) above], the guiding principle is that, if several adjacent fields owned and cultivated by the same person or persons can be combined into one field, which will be of a fairly regular shape, and will not be too large for *girdawari* purposes, they should be combined into one field, even if they are separated from one another by permanent *dauls*. But irrigated land should not be combined with any other kind of land, and, usually, irrigated fields—unless they are of less area than one *kacha bigha* or 2 *kanals*—should not be combined together, except when they are usually sown with similar crops in the same harvest.

25. Ordinarily an irrigated *khasra* number should not be more than three *kacha bighas* in area or 5 *kanals* ; and a *barani khasra* number should not be greater than 10 *kacha bighas* or 2 *ghumaons*. But imaginary boundaries should not be drawn in order to give effect to this instruction, and, if the area enclosed by the permanent field boundaries is larger than the above, the *khasra* number should include the whole area enclosed within these boundaries. The area of waste land under one number is to be limited to one square of the map. *Patwaris* must not make useless numbers merely to increase their *karguzari* returns.

26. The field *kanungo*, who will ordinarily have not more than four *patwaris* under him when all are engaged on map correction, should see each *patwari* in his

circle at least once in ten days, i.e., three times a month. At each visit he will go through all the work done by the *patwari* since his last visit. Of every field classed as C, part at least should be chained by him. He will check all the soil entries, ownership and tenancy entries and the rents. At his check he must see that mistakes are corrected, and finally he himself should ink in the *shajra* the line up to which he has checked, noting, at the same time, in the field book, after the number up to which he has checked the work, that all fields up to that number are complete in every respect. If there are any exceptions, they should be specified in the note. The *patwari* can then ink in the fields within that line, and the numbers and measurement figures, unless the *kanungo* finds that the *patwari* cannot do such work properly, in which case the *kanungo* must do it himself. If any correction is made after the fields have been inked in, a note drawing attention to it should be made in the margin by the *naib-tahsildar* or other officer responsible for it.

27. The *naib-tahsildar* should inspect each of his *patwaris* at least once a month, and at his inspection should make a sufficient check of all branches of the work to satisfy himself that the *kanungo's* work is accurate. He should pay special attention to entries of ownership, cultivation, rents, and soils. He should check every case in which the soil classification of a field has been altered. If a *kanungo* has been unable to keep pace with his *patwaris* in his inspections, the *naib-tahsildar* must arrange to give such assistance as may be required, referring to the *tahsildar* if necessary. The outturn of work in map correction is larger than in remeasurement, and consequently a large supervising staff is necessary, and ordinarily a *naib-tahsildar* will have not more than four *kanungo* under him.

28. The duty of the *tahsildar* is to satisfy himself that the check applied by the *naib-tahsildar* has been sufficient, and that the work in general is progressing properly.

29. To enable him to judge of the progress made in field work, every Settlement Officer must decide what average outturn should be expected from a working party. The standard must vary from district to district, with physical features, size of fields, nature of irrigation, and the like. It may be noted, however, that so far it has been found that a *patwari* after working for three months on map correction is able to turn out from 50 to 75 field numbers per working day. The number must of course vary with the proportion of C and D fields.

30. The instructions in paragraphs 291—4 of the Settlement Manual apply to map correction as well as to remeasurement. Survey and record work should be carried out simultaneously, and a *patwari* should not be allowed to commence field work in a second village until he has completed the *jamabandi* of the first. The inspections held while field work is in progress should be sufficient to bring all errors to light, and there is no need to have at the end a minute investigation of finished work for the purpose of detecting errors or to collect the *patwaris* in one place for that purpose. In each *tahsil* the whole work, including field survey and the preparation of *jamabandis*, should be completed in two years at most, and the Settlement Officer should indicate from the first what villages should be finished in the first year, and what villages in the second, and which of them are so large that they must be commenced in the first year in order to be finished by the end of the second. The work of map correction is best and quickest done by the *patwari* of the circle, with his previous knowledge of his villages, and the *patwari* staff should therefore be supplemented by temporary establishment only to the extent necessary to ensure the *tahsil* being finished within two years from the commencement of work.

31. The instructions contained in the note to paragraph 8 of Appendix VII apply also to corrections of the field map carried out under this appendix.

REPORT SHOWING WHETHER A CERTAIN VILLAGE CAN BE MEASURED
ON THE *tarmim* SYSTEM OR NOT.

Partial showing whether Mauza Bhana in the Sonapat tahsil can be measured
on the *tarmim* system or jadid.

The *farzi watar* has been measured by the chain and scale, with the following
result :—

A.—Data of *farzi watar*.

Serial No. of perpendicular.	PLACE WHENCE <i>watar</i> DRAWN.		PLACE WHERE <i>watar</i> ENDS.		CUTTINGS BY FIELDS.				REMARKS.
	Field No.	Angle.	Field No.	Angle.	Field No.	Distance by scale according to settlement map.	Distance by chain.	Difference.	
1	1845	From south- western corner.	1925	To north- western corner.	1845	14	12	2	Difference in the cuttings amounts only to a <i>karam</i> or two. The difference in the whole <i>kutr</i> is only 3 <i>karams</i> , which is insignifi- cant.
					1846	30	28	2	
					1861	38	37	1	
					1862	50	49	1	
					1874	53	52	1	
					1875	73	73	..	
					1894	100	102	2	
					1916	115	116	1	
					1920	128	129	1	
					1919	136	137	1	
					1921	153	154	1	
					1925	170	173	2	

B.—Data of the chomenda by fields.

Serial No.	Field No.	According to shajra.				According to chain.				Difference.			
		East.	West.	South.	North.	East.	West.	South.	North.	East.	West.	South.	North.
1	1909	19	16	16	15	19½	15	15	15	½	1	..	1
2	1910	21	19	15	16	22½	19½	16	16½	1½	½	½	1
3	1911	19	19	14	14	20	19	14	16	1	..	1	..
4	1912	19	17	14	16	19	19	15	15	..	2	1	1
5	1925	24	22	10	12	25	24	10	11	1	2	1	..

1. The fields on the spot are generally as they are shown in the settlement map, and there appears to be no difference in their shape.

2. The differences in the details of the cultivated and uncultivated areas and the number of the *khassa* numbers of the village according to the last settlement and the last *jamabandi* are shown as below :—

DETAIL.	AREA IN <i>bighas kham</i> .		Total.	<i>Khasra</i> No.	REMARKS.
	Cultivated.	Uncultivated.			
According to last settlement.	2,977	753	3,730	2,209	
According to <i>jamabandi</i> of last year.	2,993	738	3,731	2,276	
Difference {	Excess ..	16	..	1	67
	Deficiency..	..	15	..	..

3. At last settlement the calculation of the areas was generally made by the method of taking averages of the opposite sides (*lampet*), and, as far as possible, many-sided figures were made into various rectangles and their areas were calculated by the perpendicular system, and the whole area of the figure was totalled up.

4. The *lambardars* and leading villagers say that they have found the map generally accurate, but that in the south-west corner (fields Nos. 289—376), where the soil is sandy, they would like the field boundaries laid down afresh, and that they are not sure about the field boundaries resulting from the partition of *shamilat patti Awanan* made in 1899.

APPENDIX XXII.
CANCELLED.

APPENDIX XXIII.

(SETTLEMENT MANUAL, PARAGRAPH 450.)

**Rules regarding the Assessment and Collection of Owners' Rates
in Canal-irrigated *Jagir* and *Muafi* Lands.***

GENERAL RULES FOR ALL NEW *jagir* OR *muafi* GRANTS AND FOR OLD GRANTS
TO WHICH CANAL IRRIGATION HAS NOT HERETOFORE EXTENDED.

1. In the case of (a) all new grants which may be made hereafter, or (b) of lapsing grants continued to heirs by review of former orders, or (c) of old grants to which canal irrigation has not heretofore extended, the grantees shall not get the owner's rate. The rule in respect to grants of class (c) shall be subject to the following proviso:—

Proviso.—If, owing to supersession of irrigation from wells or other private works by irrigation from a Government canal, particular fields forming part of a *jagir* or *muafi* grant and assessed with land revenue at irrigation rates shall, at a settlement subsequent to the grant, be assessed at dry rates and made liable to a separate charge of the nature of owner's rate, then the grantee (if not also the proprietor or cultivator of the land) shall be entitled to compensation for the loss of the irrigated rate of land revenue which he formerly received on such fields. The compensation may take the form of an assignment of the whole or part of the owner's rate on such fields, or of a lump sum cash payment or of a separate additional assignment of land revenue, as may seem most advisable in each case.

GENERAL RULES FOR ALL OLD (*i.e.*, PREVIOUSLY MADE) *jagir* OR *muafi*
GRANTS TO WHICH CANAL IRRIGATION HAS BEEN
HERETOFORE EXTENDED.

1. If the grant was irrigated from a Government canal, either when the grant was first made or before the first regular settlement, and the grantee has hitherto enjoyed, either in the way of assignment or remission, the owner's rate or a land revenue assessed by the old procedure at canal-irrigated rates, he shall get owner's rate in future.

2. If the grant was not irrigated by the canal, either when the grant was first made or before the first regular settlement, the grantee shall not get owner's rate; but this rule shall be subject to the following:—

Proviso I.—If on the Upper Bari Doab and Upper Sutlej Inundation Canals the Government has heretofore surrendered to the grantee the charges equivalent to owner's rate, *viz.*, the water-advantage rate on the Upper Bari Doab Canal and on the Upper Sutlej Inundation Canals in the Lahore District, and half the fluctuating canal revenue on the Upper Sutlej Inundation Canals in the Montgomery District, the grantee shall enjoy the owner's rate for his life.

Explanation.—In the case of grants held by institutions, the surrender of owner's rate will be continued only during the life of the present head of the institution if there is one, and if there is no such head, the term of settlement will be substituted for the life of the holder in applying this proviso.

*Government of India, Revenue and Agricultural Department, letters No. 180, dated 17th October 1881, and No. 270, dated 6th December 1881, and Punjab Government endorsement No. 2-S., dated 16th January 1882.

Proviso II.—If, owing to supersession of irrigation from wells for other private works by irrigation from a Government canal, particular fields forming part of a *jagir* or *muafi* grant and assessed with land revenue at irrigation rates shall at a settlement subsequent to the grant be assessed at dry rates and made liable to a separate charge of the nature of owner's rate, then the grantee (if not also the proprietor or cultivator of the land) shall be entitled to compensation for the loss of the irrigated rate of land revenue which he formerly received on such fields. This compensation may take the form of an assignment of the whole or part of the owner's rate on such fields, or of a lump sum cash payment, or of a separate additional assignment of land revenue, as may seem most advisable in each case.

Proviso III.—This rule will not apply to the case of such assignees, if any, who are expressly entitled to owner's rate under the terms of their grants.

General Explanation I.—For the purpose of the above rules, the term "owner's rate" includes water-advantage revenue, and the half of the fluctuating canal revenue on the Upper Sutlej Inundation Canals in Montgomery, which represents the revenue demand at irrigated rates under the former system of assessment; and also the canal-advantage revenue rate assessable in the districts of Multan, Muzaffargarh and Dera Ghazi Khan on lands not assessed with land revenue at canal-irrigated rates of the late settlement which may hereafter be supplied with canal water.

General Explanation II.—The term "grant" means each separate village or *muafi* plot, not a grant comprising several separate villages or several separate plots.

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GLOSSARY OF VERNACULAR WORDS.

A.

ABADI DEH	..	Inhabited site of village.
ABI	..	Watered by lift from tanks, pools, marshes, or streams.
ABIANA	..	An assessment levied in addition to the assessment at unirrigated rates on account of the advantage derived from irrigation (paragraph 61).
ABWAB	..	Cesses.
ADHLAFI	..	A man who by sinking a well in another man's land acquires ownership in half of the land attached to the well (paragraph 173).
ADNA MALIK	..	Inferior owner.
ANTRAFI	..	A cess paid by artisans to the village proprietors.
ALA LAMBARDAR	..	Chief lambardar (Headman).
ALA MALIK	..	Superior owner.
AMIN	..	Surveyor employed for making village maps.
ANG	..	Cess on cattle levied by proprietors on other residents in village for grazing in village waste.
ANWANDA	..	Clearing tenant in Dera Ghazi Khan (see note, page 107).
ASAMI	..	Tenant (in old settlement literature the term is sometimes confined to a resident tenant).

B

BACHH		Distribution of revenue over holdings.
BADASTUI		Ledger.
BAHL -		Unaltered.
BAJRA		A kind of millet (<i>Pennisetum typhodeum</i>).
BAKHRA	..	Share (in Pathan tracts).
BANDA	..	Hamlet (in Pathan tracts).
BANGAR	..	Upland tract.
BANIA	..	Village shopkeeper, money-lender.
BANJAR	..	Uncultivated land.
BANJAR JADID	..	New fallow (for full explanation see paragraph 267).
BANJAR KADIM	..	Old fallow (for full explanation see paragraph 267).
BARANI	..	Dependent on rainfall.
BATAI	..	Rent taken by division of crop.
BATTA	..	A form of village tenure (see paragraph 189).
BHAIACHARA	..	Sub-number (paragraph 271).
BHOANG	..	Due paid harvest by harvest to a godkash tenant (note on page 107).
BHUNGA	..	Cess on cattle levied by proprietors on other residents in a village for grazing in village waste.
BHUR	..	Sand.

B—concluded.

- BIGHA** .. A measure of area. In the Western Punjab the *bigha* is half a *ghumao*, in the east the *shah-jahani bigha* is five-eighths of an acre and the *zamindari* or *kacha bigha* five-twenty-fourths of an acre. The actual *bigha* used by the *zamindars* does not always correspond with the *kacha bigha* used in settlement surveys (see paragraph 248).
- BIR** .. A preserve.
- BISWA** .. One-twentieth of a *bigha* (*q. v.*).
- BISWI** .. A fee paid in recognition of property right.
- BISWANSI** .. One-twentieth of a *biswa* (*q. v.*).
- BURJI** .. A survey pillar.
- BUTEMAR** .. A tenant who has acquired permanent rights in the land by clearing it of *jangal*.

C.

- CHAHARAM** .. A grant of one-fourth of the ruler's share of the produce to an individual or family of influence.
- CHAH** .. Well, well-holding.
- CHAHÍ** .. Irrigated from a well.
- CHAHÍ KHALIS** .. Irrigated only from a well as distinguished from *chahi-nahri* (*q. v.*) or *chahi-sailab*.
- CHAHÍ-NAHRI** .. Irrigated partly from a well and partly from a canal.
- CHAK** .. Assessment circle, a block of land.
- CHAKBAT** .. Applied to a *patti* or sub-division of an estate which has all its land lying in one block (see *khetbat*).
- CHAKDAR** .. Inferior owner (in South-West Punjab). For full explanation, see paragraph 168.
- CHAKLA** .. Assessment circle.
- CHAKOTA** .. Lump grain rent or rent consisting of a fixed amount of grain in the *rabi*, and a fixed amount of cash in the *kharif* harvest (see paragraph 312).
- CHAPPARBAND** .. A term for a resident tenant (see paragraph 196) entitled to permanent occupation at a fixed rate of rent (see paragraph 197).
- CHARI** .. A kind of millet (*q. v.*) grown for fodder (see *Jowar*).
- CHAUDHRI** .. Rural notable.
- CHAUKIDAR** .. Village watchman.
- CHAUKIDARA** .. Cess or fund for payment of village watchmen.
- CHELA** .. Spiritual son or pupil.
- CHHAMBH** .. A marsh.
- CHHER** .. A system of silt clearance under which the clearance is effected by the irrigators themselves (see paragraph 449).
- CHUNDAYAND** .. A custom of inheritance under which several sons by one wife inherit the same share as a single son by another wife (see *pagvand*).

D.

DAFTRI	..	Owner in Pathan tracts (see paragraph 157).
DAK	..	Post.
DAKAR	..	Stiff clay soil.
DARBAR	..	Council or other governing body in a Native State.
DARKHWAST MALGUZARI	..	Tender of engagement to pay the land revenue assessment.
DARYA	..	River.
DA-TUR-UL-AMAL	..	Hand-book for the guidance of district revenue officers in carrying out the provisions of the settlement.
DAUL	..	Estimate of revenue payable by different estates (see paragraph 16).
DAULP	..	Ridge.
DHARAT	..	Weighment fee, levied on sales of produce within villages (see paragraph 94).
DHENKLI	..	A hand-lever well.
DHOK	..	Hamlet.
DOAB	..	Country lying between two rivers.
DOHLI	..	Death-bed gift of a small plot of land to a Brahman.

E.

EKFASLI	..	Yielding one crop in each agricultural year.
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F

FAKIR	..	Religious mendicant.
FARD RANNGAZI	..	List of fields for colouring purposes.

G.

GHAIRDAKHILKAR	..	Tenant-at-will.
GHAIRMAURUSI	..	Tenant-at-will.
GHAIRMUMKIN	..	Barren
GHI	..	Clarified butter.
GHUMAO	..	A measure of area (see paragraph 248).
GIRDAWAR	..	Kanungo or supervisor of patwaris (paragraph 292-A).
GIRDAWARI	..	Harvest inspection.
GODKASH	..	Tenant in Multan who has acquired a permanent title by breaking up waste (note on page 107).
GORA	..	Land close to a village site which is often heavily manured.
GOSHA	..	Corner.
GOT	..	Sub-division of a tribe.
GURU	..	Spiritual father or guide.

H.

HAKIMI HISSA	.. The ruler's share of the produce.
HAKK BUHA	.. Door tax, a cess levied by proprietors from other residents in a village (see paragraph 94).
HAKKDAR	.. A tenant entitled to permanent occupation at a fixed rate of rent (see paragraph 197).
HAMSAYAS	.. Dependents occupying outlying hamlets of a Patnan estate on condition of assisting in repelling raids on the lands of the proprietors (see paragraph 159).
HARI	— Applied to land cropped only in the rabi harvest.
HATHRAKHAIDAR	.. A man who agreed to become responsible for payment of the revenue on condition of receiving the proprietor's share of the produce, less a fee paid in recognition of the owner's proprietary title (see paragraph 172).

I.

IKRARNAMA	.. Village administration paper, same as wajib-ul-arz.
'ILAKAWAR	.. Relating to an 'ilaka or tract.
INAM	.. A cash allowance paid to secure the services of a man of influence.
INAMDAR	.. The holder of an inam (q. v.).
ISMI	.. A proprietary fee.

J.

JADID	.. See banjar jadid. Also a class of tenant (see paragraph 196).
JAGIR	.. An assignment of land revenue.
JAGIRDAR	.. Holder of an assignment of land-revenue.
JAMA	.. Land-revenue demand.
JAMABANDI	.. Register of holdings of owners and tenants showing land held by each and amounts payable as rent, land-revenue, and cesses.
JAMA'I	.. A class of tenant (see paragraph 196).
JANGAL	.. Uncultivated land covered with brushwood and small trees.
JHALAR	.. A Persian-wheel by which water is raised from a stream or canal.
JHALARI	.. Irrigated by a jhalar (q. v.).
JHIL	.. A sheet of water.
JHURI	.. Fee paid to proprietor when entering on possession of land (see paragraph 168).
JINSWAR	.. Relating to crops, also the crop statement for any particular harvest.
JOWAR	.. A kind of millet (<i>Sorghum vulgare</i>).

K.

KARZA	.. Possession.
KACHA	.. Incomplete or imperfect, applied to village measures of area and weight as distinguished from those recognised by Government; not lined with masonry (of a well).
KACHA ASAMI	.. Term used for a tenant-at-will (see paragraph 197).
KACHA BIGHA	.. See bigha.
KACHA MALBA	.. The system under which the amount actually expended on the common purposes of a village is distributed periodically over the proprietors. To be distinguished from pakka malba (q. v.).
KACHAURI	.. District Court-house.
KADAM	.. A pace (see paragraph 243).
KADIM	.. See banjar kadiin, also a class of tenant (see paragraph 197).
KADIMI	.. A class of tenant (see paragraph 198).
KAFIYAT	.. Report note.
KALAR	.. Barren land, also applied to reh efflorescence, and in the east of the Punjab to sour clay rice land (kalar dahr).
KAMIANA	.. Cess paid by artizans to the proprietors of the village in which they ply their trade (see paragraph 94).
KAN	.. Appraisalment of crops, realization of landlord's share of produce in cash after appraising its amount and value.
KANAL	.. A measure of area (see paragraph 243).
KANIA	.. A man who appraises crops.
KANKAR	.. Lime modules.
KANKUT	.. Same as kan (q. v.).
KANUNGO	.. Supervisor of patwaris.
KARAM	.. Unit of length.
KARDAR	.. Title of official in Indian State.
KAROTZARI	.. Outturn of work.
KARUKAN	.. Length and breadth.
KASUR	.. Fee paid in recognition of proprietary title (see paragraph 170).
KPADIR	.. Lowlying land near river.
KHAKA	.. Rough plan.
KHALSA	.. The Sikh commonwealth. Revenue credited to Government as contrasted with jagir (q. v.) revenues.
KHAM TAHSIL	.. Direct management of estate by Government.
KHAKABA	.. Portion of crop which has failed to come to maturity.
KHARCH	.. Cess realised by landlord in addition to rent (see paragraph 899).
KHARIF	.. Autumn harvest.
KHASANVE	.. Same as vesh (q. v.).
KHASRA	.. List of fields, field register.
KHASRA GIRDAWARI	.. Harvest inspection register.
KHATA	.. Holding of a tenant.

K--concluded.

KHATAUNI	.. A list of holdings of tenants. Holding slips prepared at re-measurement (see Appendix VII).
KHETBAT	.. Applied to a patti or sub-division of an estate, all the land of which does not lie in a single block (see chakbat).
KHEWAT	.. A list of owners' holdings.
KHEWAT-KHATAUNI	.. A combined khewat and khatauni corresponding to the present jamabandi (see paragraph 274).
KHÜDKASHT	.. Cultivated by the owner himself.
KHULA VESH	.. Fresh calculation of shares at time of <i>vesh</i> (<i>q. v.</i>). (see paragraph 158).
KHUSH-HAISYATI	.. Owner's rate, water or canal advantage rate.
KILLABANDI	.. (See Appendix XIV).
KUDHI-KAMINI	.. A cess on hearths realized by proprietors from other residents in a village (see paragraph 94).
KUHMAR	.. A tenant in Dera Ghazi Khan who has earned a permanent title by sinking a well (see paragraph 211).

L.

LAKH	.. 100,000.
LAKHIRAJ	.. Exempt from assessment.
LAMBARDAR	.. Village headman.
LATHA GIRDAWARI	.. Cloth copy of the patwari's map (paragraph 292 and Appendix XXI).
LATHBAND	.. A tenant who acquires rights in land by embanking fields (see paragraph 211).
LATHMAR	.. Same as lathband (<i>q. v.</i>).
LICHH	.. Fee paid in recognition of proprietary title (see paragraph 169).
LUNGI	.. Fee paid to proprietor when entering on possession of land (see paragraph 168).

M.

M'AFI	.. Revenue-free.
M'AFIDAR	.. The holder of an assignment of land-revenue.
MAHAL	.. Estate.
MAHSUL	.. Share of produce due to state, now share of produce taken by person who pays the revenue in money (see paragraph 170).
MAHSULKHOR	.. A kind of land-revenue farmer (see paragraph 172).
MAIRA	.. Sandy loam.
MAL	.. Land-revenue.
MALATAR	.. Same as hamsaya (<i>q. v.</i>).
MALBA	.. Fund out of which common village expenses are defrayed.
MALGUZAR	.. Person responsible for payment of land-revenue.
MALGUZARI	.. Relating to assessment assessable.

M—concluded.

MALIK	.. Owner in Western Punjab malik means a leading man in a section of a tribe.
MALIK ADNA	.. Inferior proprietor.
MALIK ALA	.. Superior proprietor.
MALIKANA	.. Fee paid in recognition of proprietary title.
MALIK KABZA	.. A man who owns the land actually in his possession, but has no share in the common property of the village community (see paragraph 142).
MARLA	.. A measure of area (see paragraph 248).
MASRI	.. A small pulse.
MATYAR	.. A word used in United Provinces for a clay soil.
MAURUSI	.. Occupancy tenant.
MAUZA	.. Village.
MAUZAWAR	.. By villages (paragraph 512).
MILAN KHASRA	.. An area statement abstracted from the khasra (<i>q. v.</i>) annual area statement.
MILAN RAKBA	.. Annual area statement.
MILKAYAT ALA	.. Superior ownership.
MILKIYAT ADNA	.. Inferior ownership.
MILKIYAT MAKBUZA	.. Tenure of a malikk abza (<i>q. v.</i>).
MIN	.. Portion.
MINHAI	.. Excluded from the assessable area.
MINJUMLA	.. Part out of a whole (Instruction 8, Appendix VIII).
MIRASI	.. A class of landholder (see paragraph 196).
MIRASIDAR	.. A class of landholder (see paragraph 196).
MISL HAQIYAT	.. Record-of-rights.
MOTH	.. A small pulse (<i>phaseolus trilobus</i>).
MUHTARAF	.. Same as ahtrafi (<i>q. v.</i>).
MUKADDIM	.. Superior proprietor (see paragraph 167), also a leading man or headman in a village community (see paragraph 115).
MUKADDIMI	.. Fee paid to superior proprietor in recognition of proprietary title (see paragraph 169).
MUKARRARIDAR	.. A kind of occupancy tenant (see paragraph 211).
MUNDHIMAR	.. A man who acquires occupancy right in land by clearing it of jangal (see paragraph 211).
MUNSHI	.. An Indian clerk.
MUNTAQIIB ASAMIWAR	.. Statement of owners' and tenants' holdings with detail of fields and rent, &c.
MUSAVI	.. Mapping sheet.
MUSHAKHSADAR	.. A farmer of the land-revenue (see paragraph 172).

N.

NAGHA	.. Commutation paid for failure to perform <i>chhar</i> (<i>q. v.</i>) labour.
NANRI	.. Irrigated from a <i>cana</i>

N—concluded.

NAHRI-PARTA	.. Assessment rate over and above the assessment rate on unirrigated land applied to nahri land in calculating the fixed assessment which it shall pay (see paragraph 446).
NAIB-TAHSILDAR	.. The deputy or assistant of the tahsildar (<i>q. v.</i>).
NAKSHA ALAMAT	.. List of conventional signs.
NAKSHA-INTIKAL	.. Statement of land transfers.
NAKSHA-LAKHIRAJ	.. Statement of land-revenue assignments.
NAKSHA-THAKBAST	.. Village boundary map (see paragraphs 248 and 270).
NALA	.. Drain or watercourse.
NAUTOR	.. Land brought under cultivation for the first time.
NAZIM	.. Governor of a large tract in an Indian State.
NAZRANA	.. An abatement from the revenue of an estate, &c., retained by Government in making a land-revenue assignment to an individual.
NAZUL	.. Land, &c., which has become the property of Government by escheat or failure of heirs.
NIAT	.. Manured.

P.

PACHOTRA	.. A surcharge of 5 per cent. on the revenue paid to village headmen.
PAG	.. Fee paid to proprietor on entering on possession of land (see paragraph 168).
PAGVAND	.. A custom of inheritance under which sons by different wives inherit equal shares in land (see chundavand) the property being divided <i>per capita</i> .
PAHIKASHT	.. A tenant who does not live in the village in which he cultivates land.
PAIPATH	.. A fee paid to a superior owner in recognition of his proprietary title (see paragraph 169).
PAKKA	.. Complete or perfect applied to measures of weight and area recognized by Government as distinguished from those used in villages; lined with masonry (of a well).
PAKKA MALBA	.. The system under which the amount to be collected for common village expenses is fixed at a definite percentage on the land revenue.
PANA	.. A sub division of an estate (see paragraph 128).
PANANI	.. A tenant protected from ejection for a term of years (see paragraph 203).
PANAPALAT	.. A form of periodical distribution of land in the Gurgaon District (see paragraph 158).
PARCHA	.. An extract from a khatauni or jamabandi, a copy of the entry in a khatauni regarding his holding given to a right-holder at measurement (see paragraph 273 and paragraph 2 Appendix VII).
PARGANA	.. A group of estates forming a sub-division of a district or tahsil.
PART SIRKAR	.. Government copy of the new settlement record.

P—concluded.

PART TAHSIL	.. Tahsil copy of the settlement map (paragraph 292 and Appendix XXI).
PARTA	.. Assessment rate.
PATTA	.. Leather cover such as is used for protecting account books by Indan shopkeepers (see Appendix VII); also deed of grant (see paragraph 152).
PATTI	.. A sub-division of an estate (see paragraph 128); also a well holding (see paragraph 165).
PATTIDAR	.. A form of village tenure (see paragraphs 187, 188).
PATWARI	.. A village accountant or registrar.
PUGH BAKRI	.. A cess on marriage levied by proprietors from other residents in a village (see paragraph 94).

R.

RABI	.. Spring harvest
RAIYAT	.. Tenant.
RAIYATWARI	.. A form of settlement in which the occupant of each holding is under a separate engagement with Government, as distinguished from the village settlement in force in North-Western India.
RAKH	.. A preserve.
RANGSAZ	.. A colourist.
RASSA-BUTI	.. A form of tenure in riverain estates in Sialkot (see note on page 72).
RASTAH	.. Pathway.
RAUSLI	.. A loam soil.
RIWAJ-I-AM	.. Record of customs followed by the chief tribes in a district in the matter of marriage, inheritance, &c. (see paragraphs 561—567).
RBT	.. Sand.
ROHI	.. A stiffish soil containing a considerable amount of clay.
RUBAKARI-AKHIS	.. Brief abstract of settlement proceedings appended to settlement record (see paragraph 270).

S.

SABIK	.. Former.
SADR	.. Head-quarters station.
SADR MALGUZARS	.. Leading landowners allowed to become responsible for revenue assessed on an estate (see paragraph 17).
SAILAB	.. Flooded or kept permanently moist by river.
SAILABA	.. Same as sailab (q. v.).
SA'IB	.. Miscellaneous income derived from an estate by its owners over and above the profits of cultivation (see paragraph 856).
SANAD	.. A deed of grant.
SAKAK	.. Road.
SARSAHI	.. A measure of area (see paragraph 249).

S—concluded.

SARSARI PARTA	..	An all-round rate on cultivation without discrimination of soils or classes of land.
SAWANI	..	Cropped only in the autumn harvest.
SAYAR	..	See sa'ir.
SER	—	A measure of weight, $\frac{1}{4}$ th of a maund.
SERI	..	Grant of land made by Pathan Chief to men who helped him with their swords or their prayers.
SERMANI	—	A fee of one ser in the maund of produce paid in recognition of proprietary title.
SHAHJAHANI BIGHA	..	See bigha.
SHAHNAHRI	..	Irrigated from a canal owned by the State.
SHAJRA	..	Map, plan
SHAJRA KISHWAR	..	Village field map.
SHAJRA NASH	..	Genealogical tree of landowners of a village.
SHAMILAT	..	Village common land.
SHIKAST	..	Broken.
SHORA	..	Saltpetre.
SIHADDA	..	Masonry pillar or platform erected at point where boundaries of three villages meet.
SILHDAR	..	Same as chakdar (<i>q. v.</i>).
SIR JAGIR	..	Land owned by jagirdar in an estate of which the revenue is assigned to him.
SIR-O-PA	..	Fee paid to proprietor when entering on possession of land (see paragraph 168).
SIWAI	..	Cesses, also same as sa'ir (<i>q. v.</i>).

T.

TAFRIK	—	Distribution of revenue over holdings.
TAHRIJ ASAMIWAR	..	Abstract of khatauni showing tenants' holdings with their areas and rents, but without detail of fields (see paragraph 270).
TAHSIL	..	A sub-division of a district, charge of a tahsildar.
TAHSILDAR	..	Official in chief executive charge of a tahsil.
TAKAVI	..	Loan granted by Government to a landowner for agricultural purposes.
TALUKDAR	..	A superior proprietor (see paragraphs 108, 148, 145).
TARADDADKAR	..	A class of tenant in Jhang (see paragraph 211).
TARAF	..	A sub-division of an estate.
TARIKA PAIMAISH	..	Note of method of survey (Appendix XXI).
TARMIN	..	Correction.
TAWANI	..	A class of tenant in Kohat (see note on page 102).
THANA	..	Police Station or the jurisdiction of a Police Station (paragraph 579).
THANA PAWNI	..	Marriage fee levied by proprietors of village from other residents (see paragraph 94).
THOK	..	A sub-division of an estate (see paragraph 128).
THULA	..	A sub-division of an estate (see paragraph 128).

V.

- VASH** .. Periodical redistribution of land among proprietors
(see paragraph 158).

W.

- WAJIB-UL-'ABZ** .. Village administration paper (see paragraphs
295-296-A and Appendix VIII).
WARIS .. Landholder (see paragraphs 152, 175, 178 and
178-A).
WARISI .. Right of the waris (q. v.).
WATAR .. Line.
WIRBANA .. Fee paid in recognition of proprietary title.

Z.

- ZABTI** .. Cash rents levied on account of certain crops.
ZAIL .. A group of estates out of which some representa-
tive man is appointed zaildar.
ZAILDAR .. A man of influence appointed to have charge of a
zail.
ZAMINDAR .. Landowner.
ZAMINDARI .. A form of village tenure (see paragraph 186).
ZAMINDARI BIGHA .. See bigha.
ZAR-I-NAGHA .. Fund formed out of commutation paid by
persons who do not perform the chher (q. v.).
labour for which they are responsible.
ZILLAH (ZIL'A) .. District.

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